

Figure 9-118 Strap 10 frequency response envelope for x-axis 0.05 g excitation

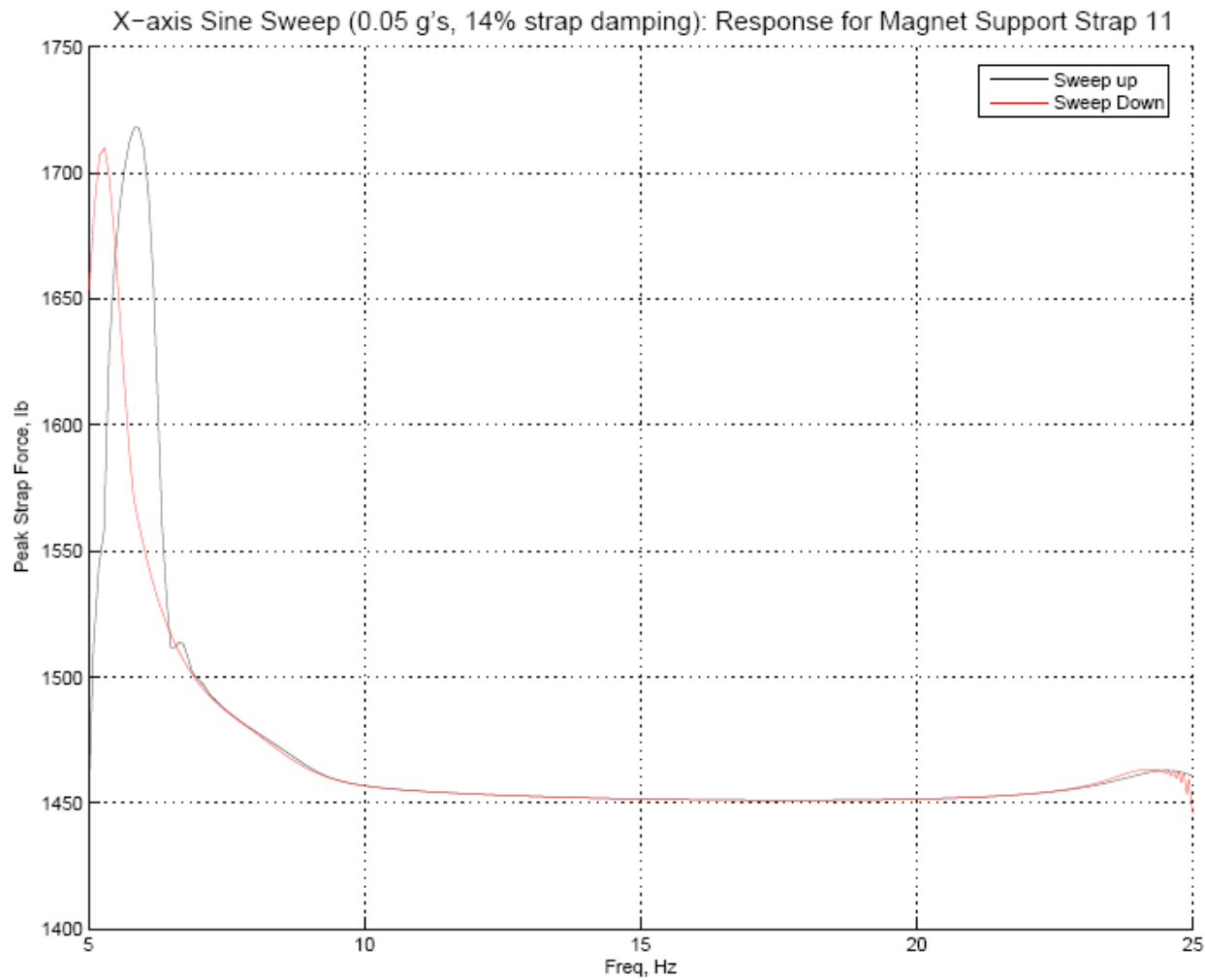


Figure 9-119 Strap 11 frequency response envelope for x-axis 0.05 g excitation

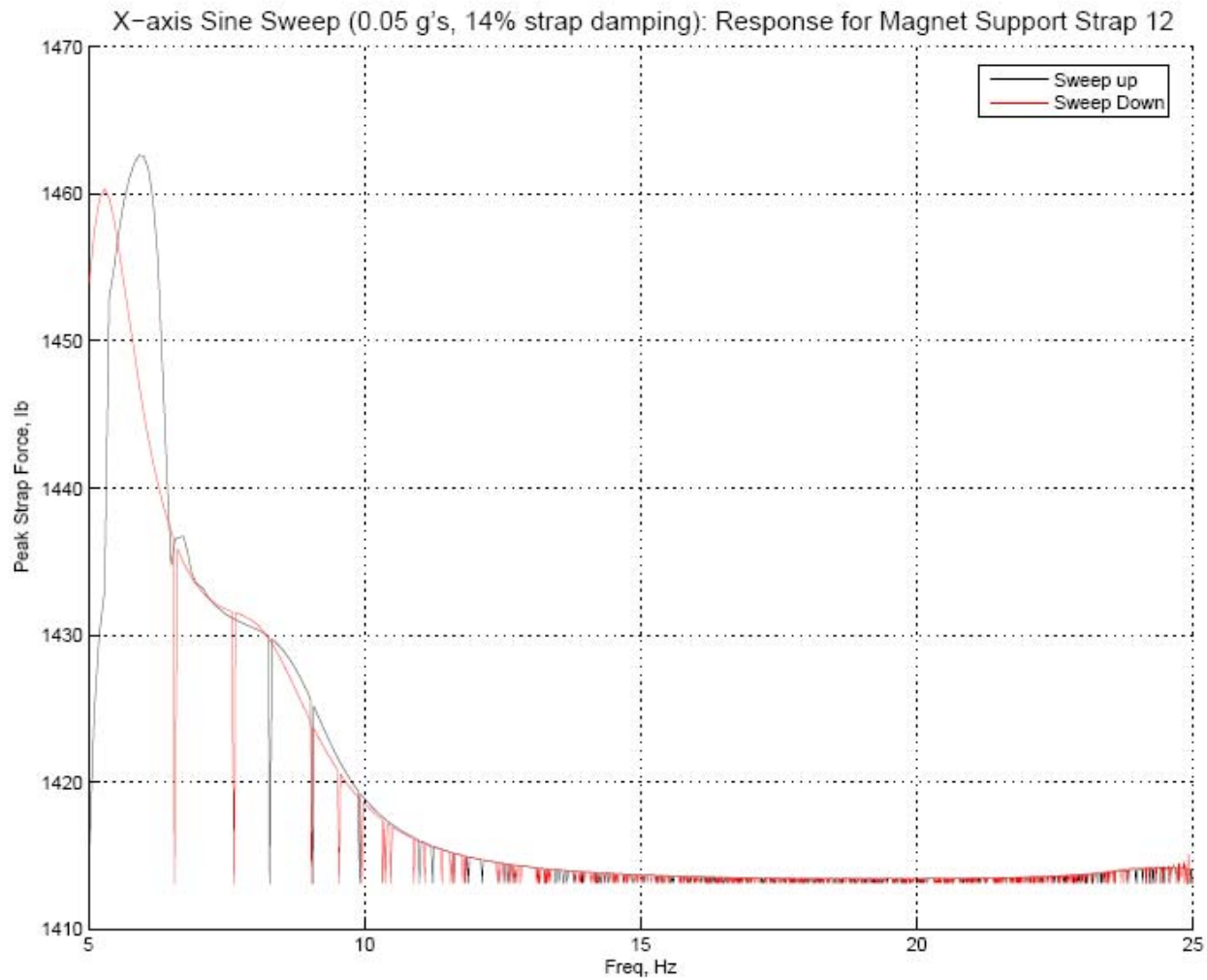


Figure 9-120 Strap 12 frequency response envelope for x-axis 0.05 g excitation

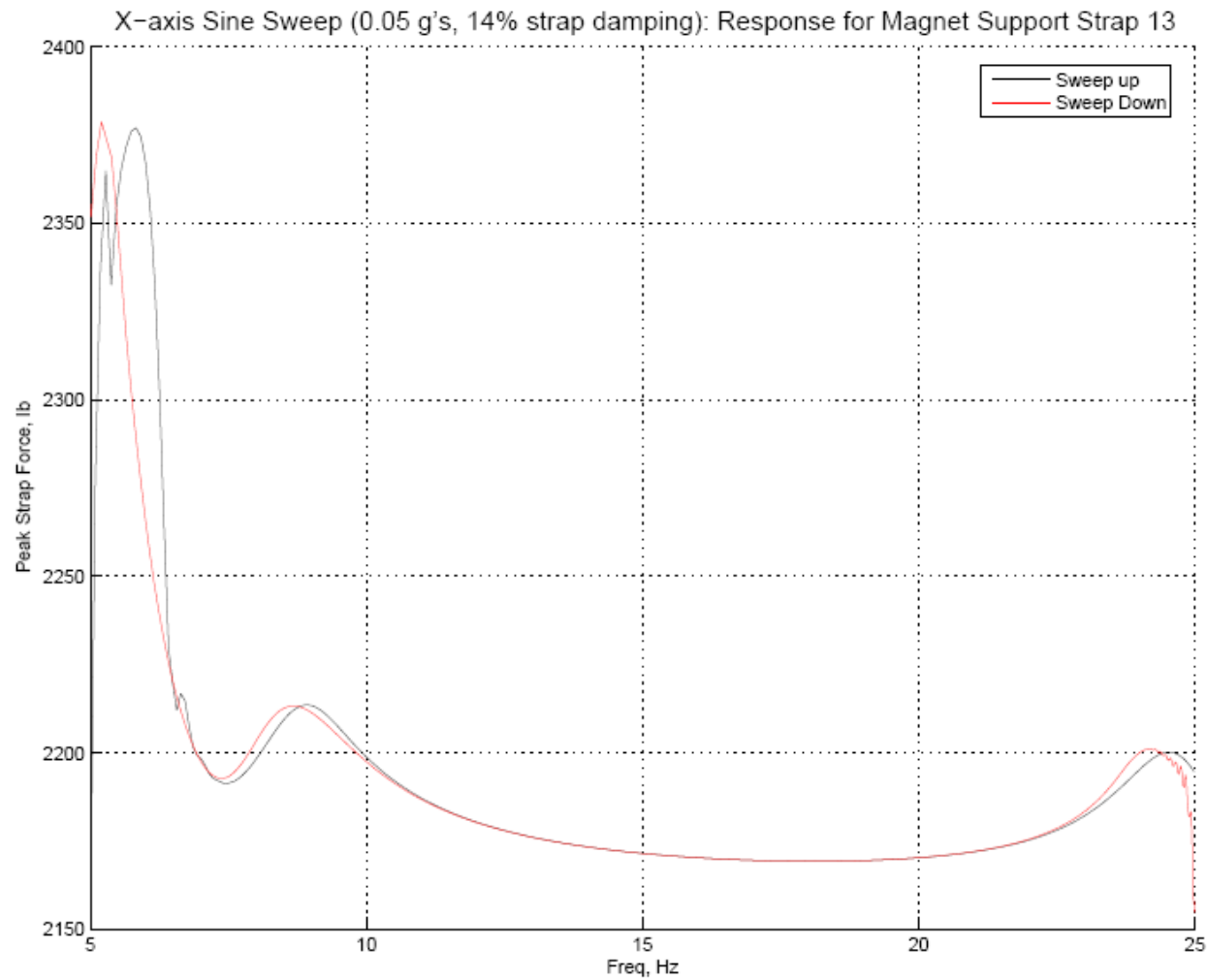


Figure 9-121 Strap 13 frequency response envelope for x-axis 0.05 g excitation

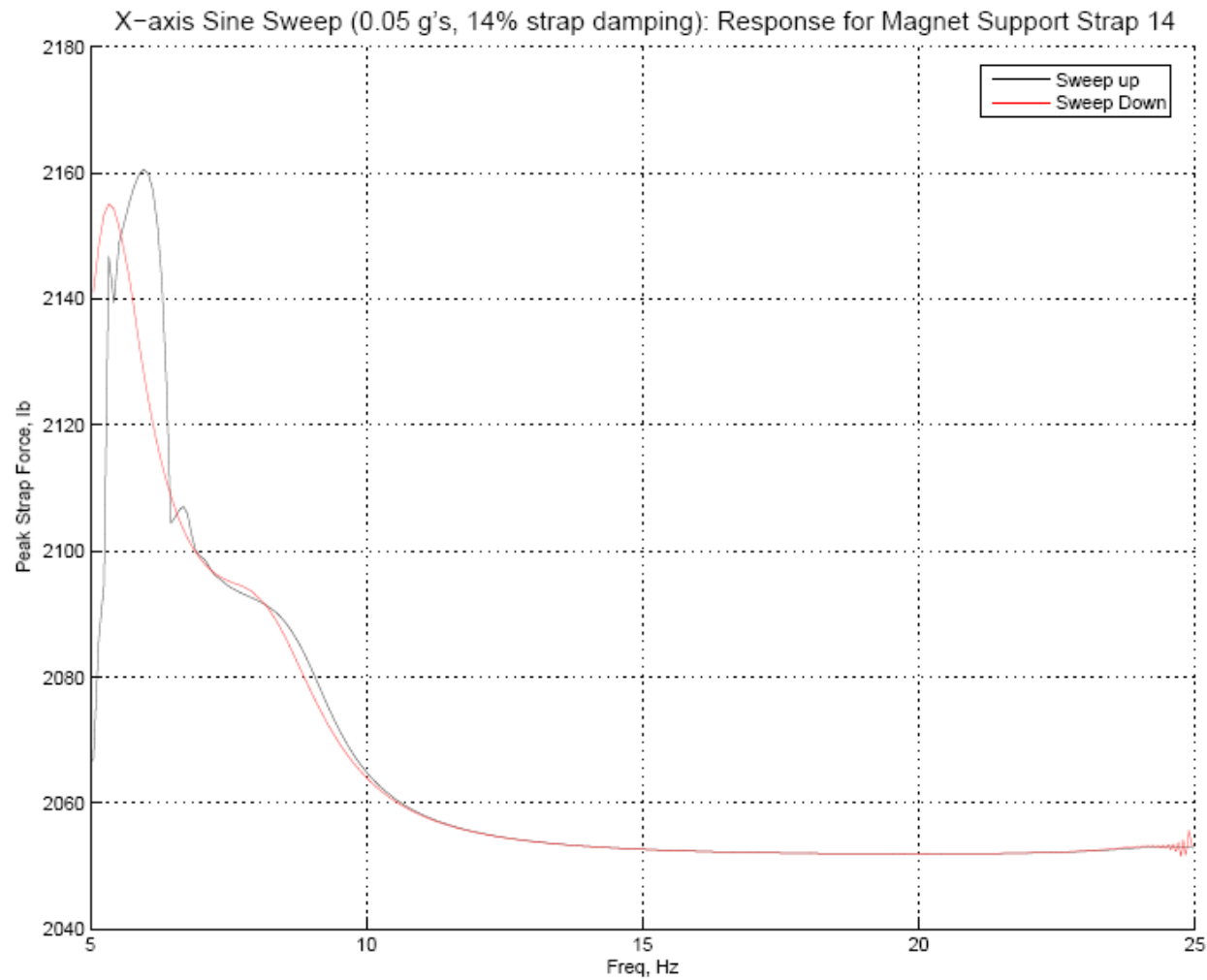


Figure 9-122 Strap 14 frequency response envelope for x-axis 0.05 g excitation

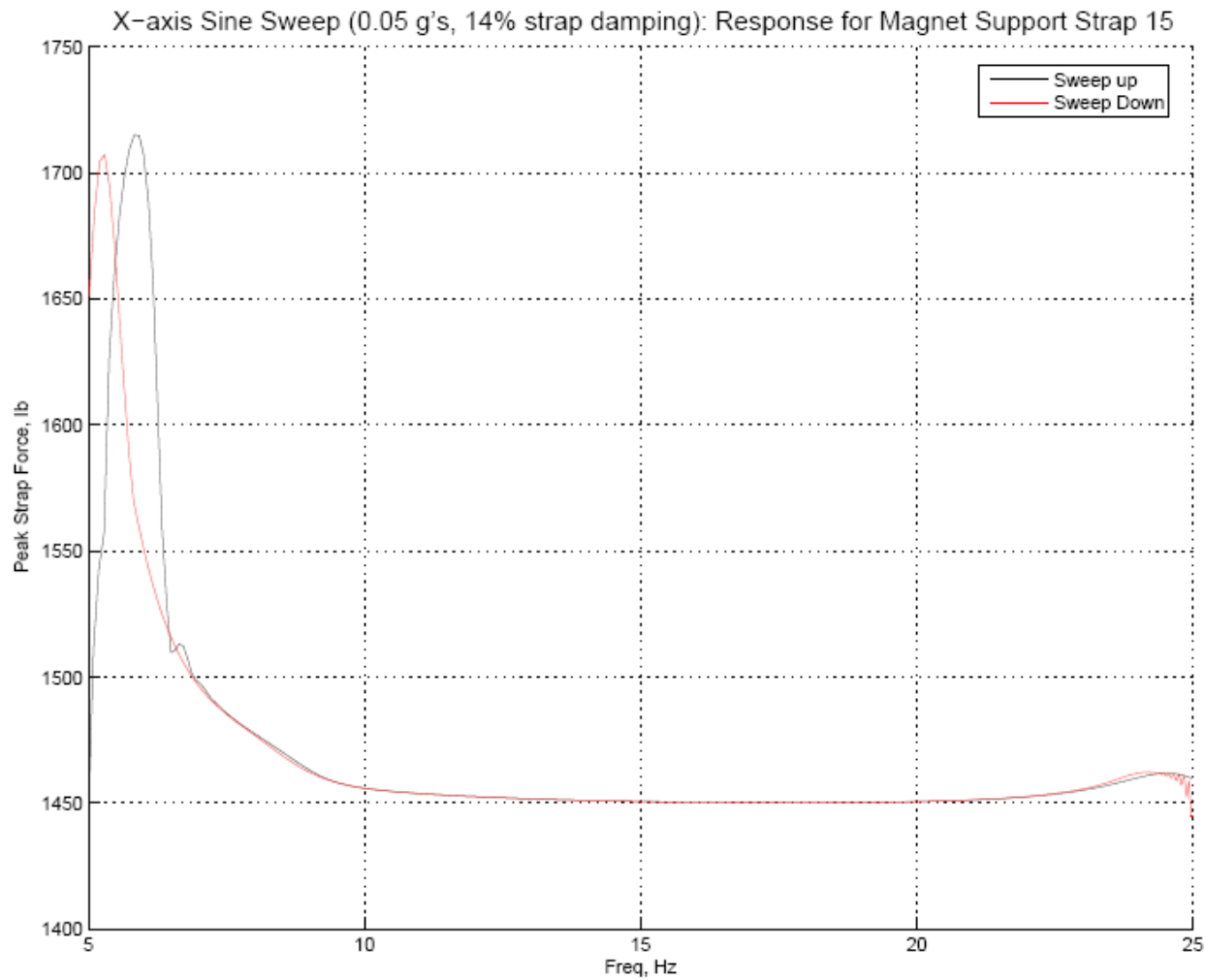


Figure 9-123 Strap 15 frequency response envelope for x-axis 0.05 g excitation

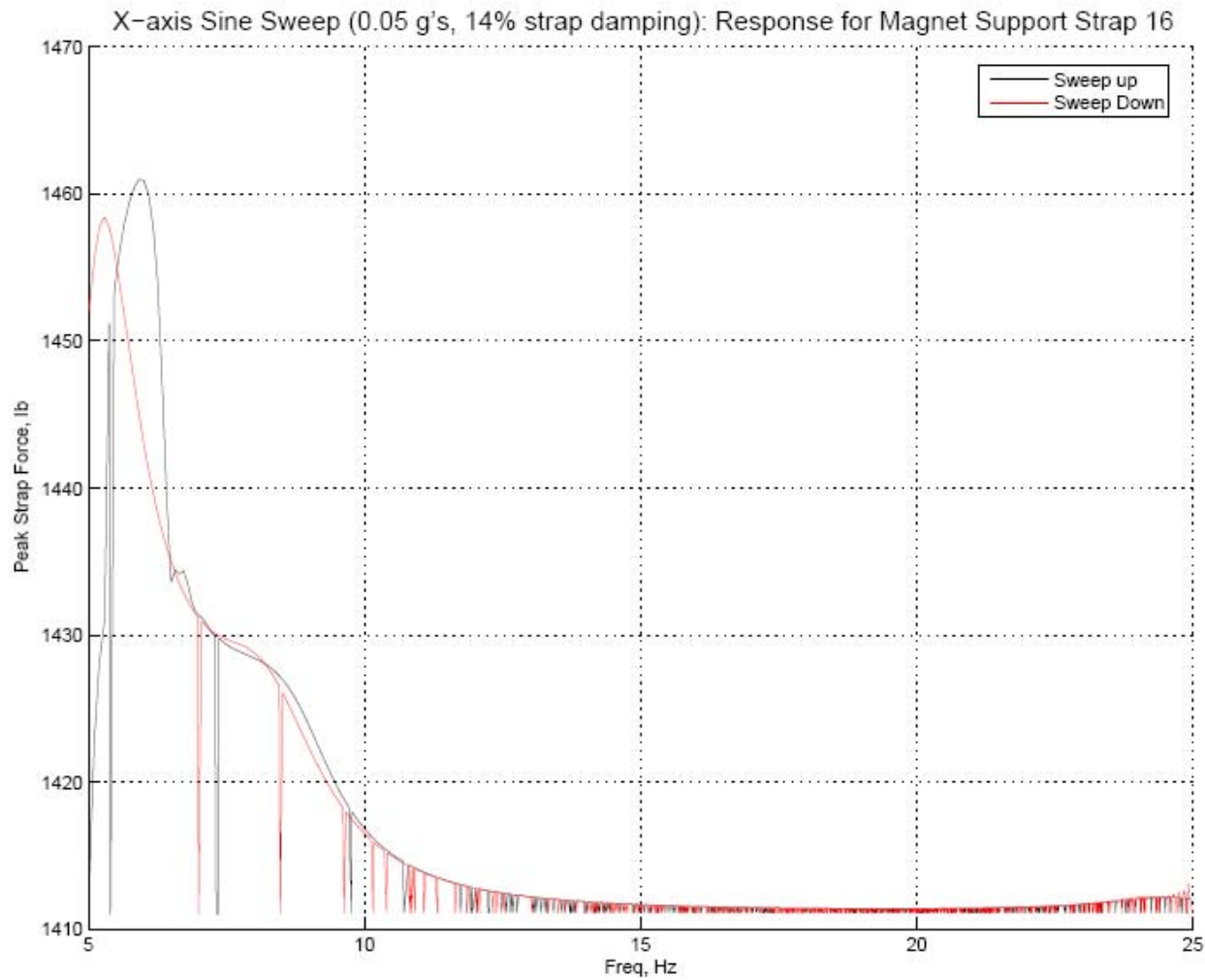


Figure 9-124 Strap 16 frequency response envelope for x-axis 0.05 g excitation

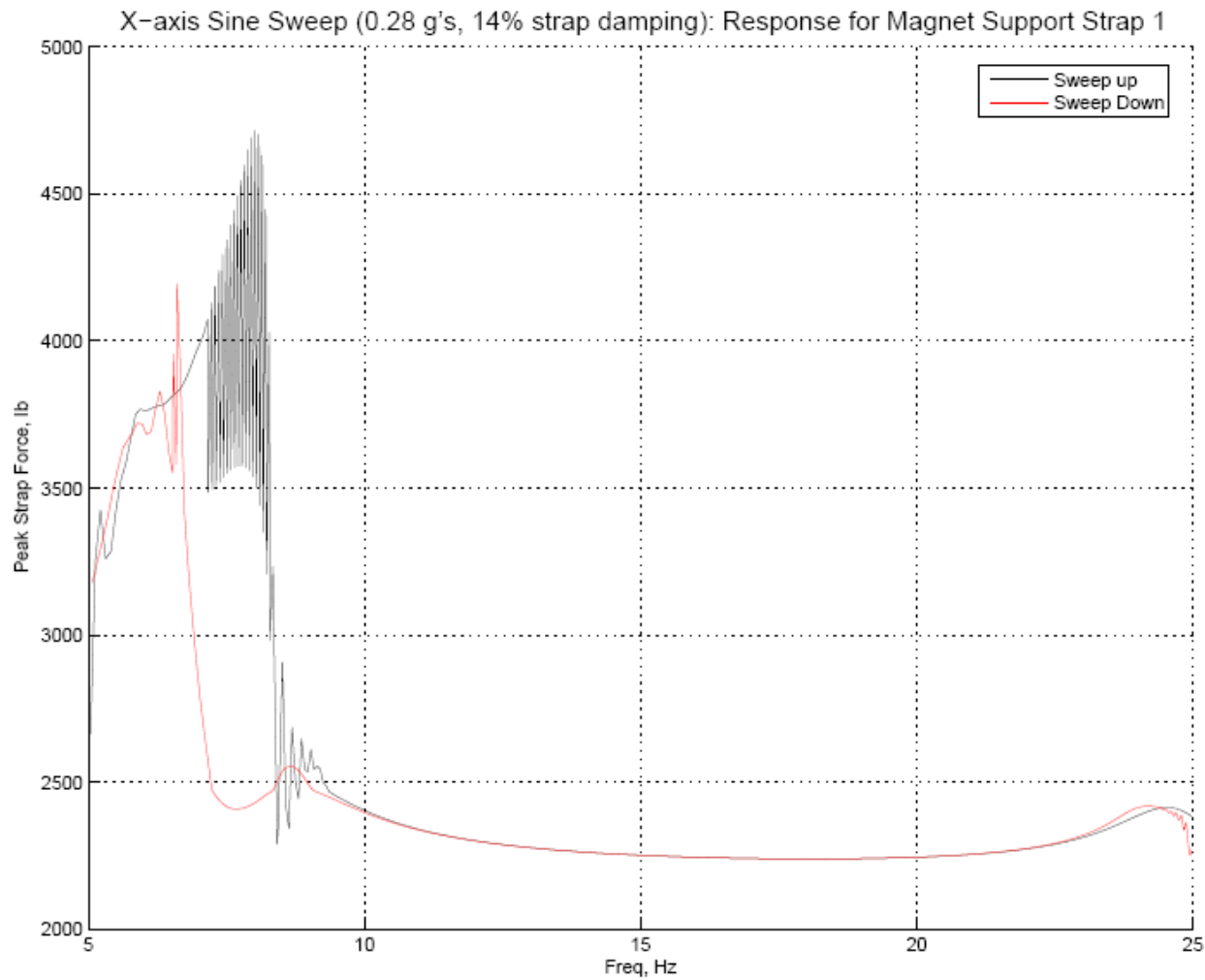


Figure 9-125 Strap 1 frequency response envelope for x-axis 0.28 g excitation



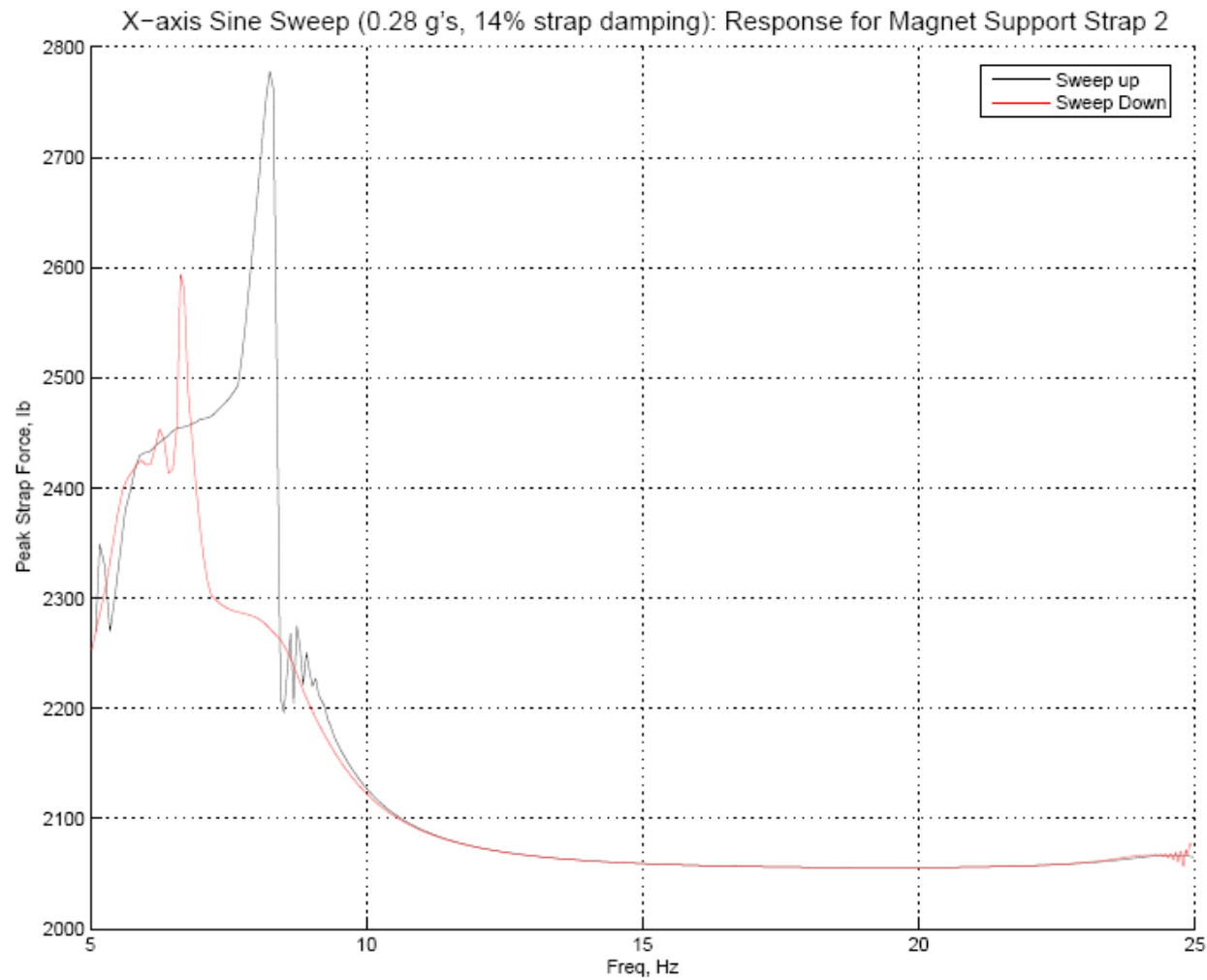


Figure 9-126 Strap 2 frequency response envelope for x-axis 0.28 g excitation

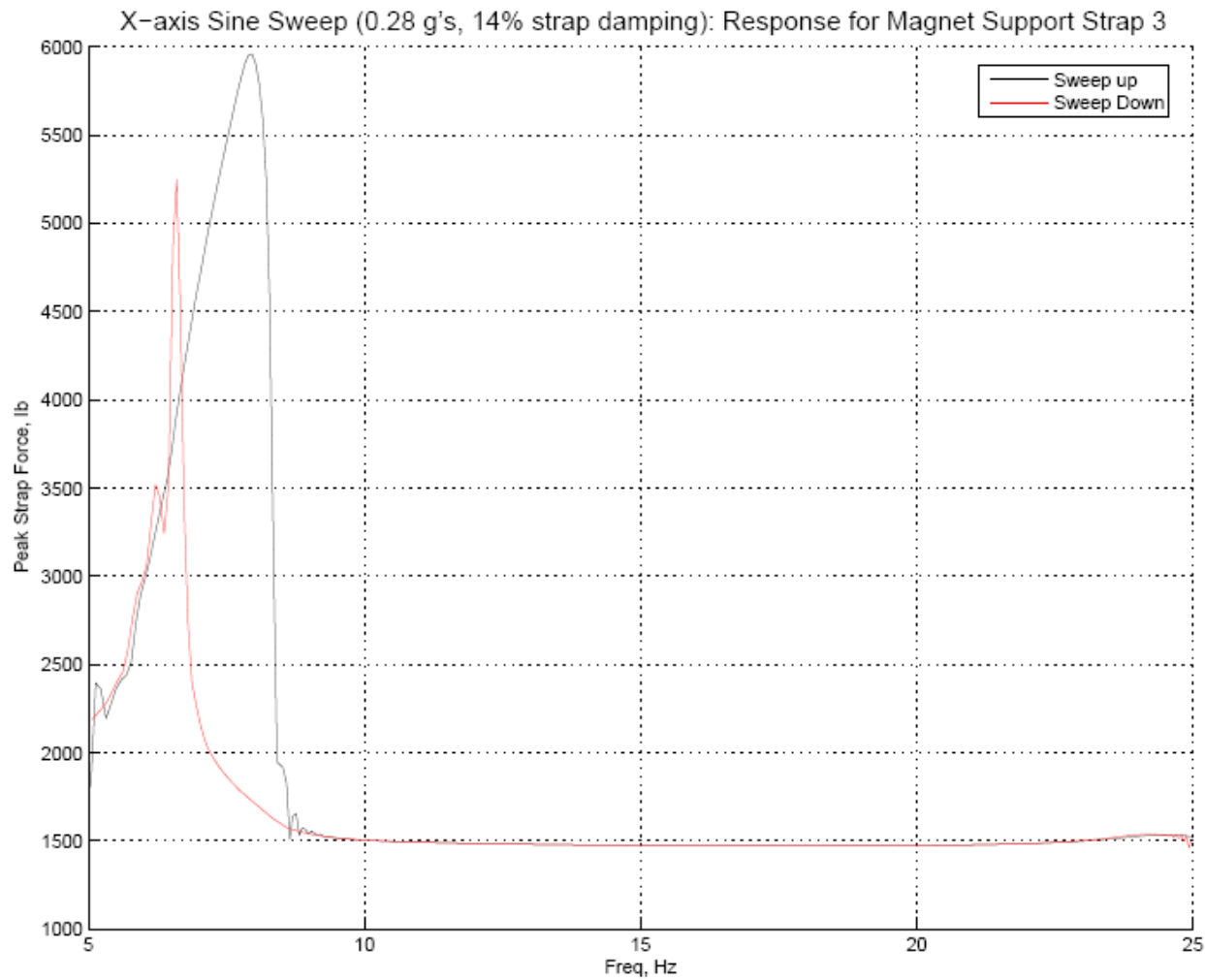


Figure 9-127 Strap 3 frequency response envelope for x-axis 0.28 g excitation

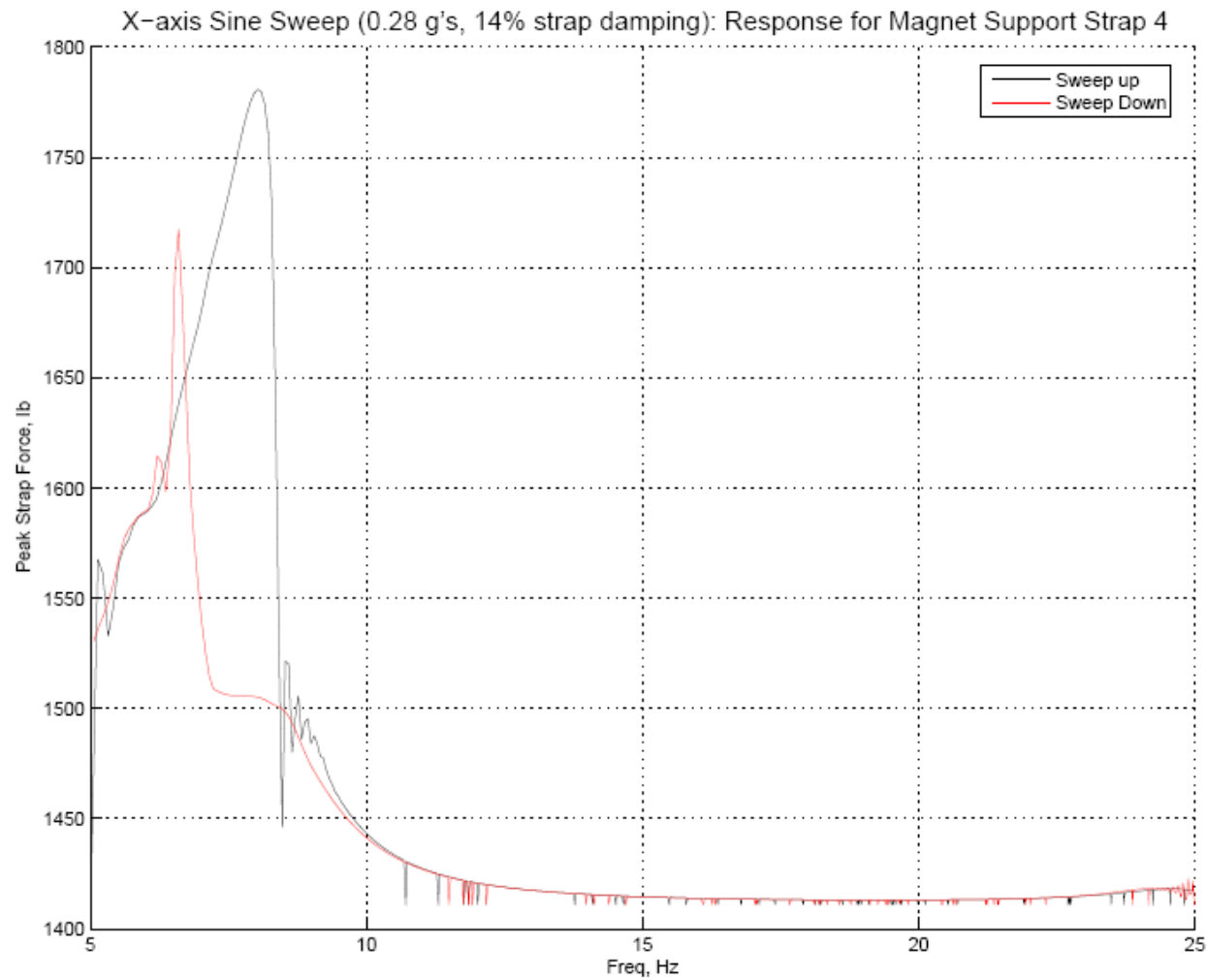
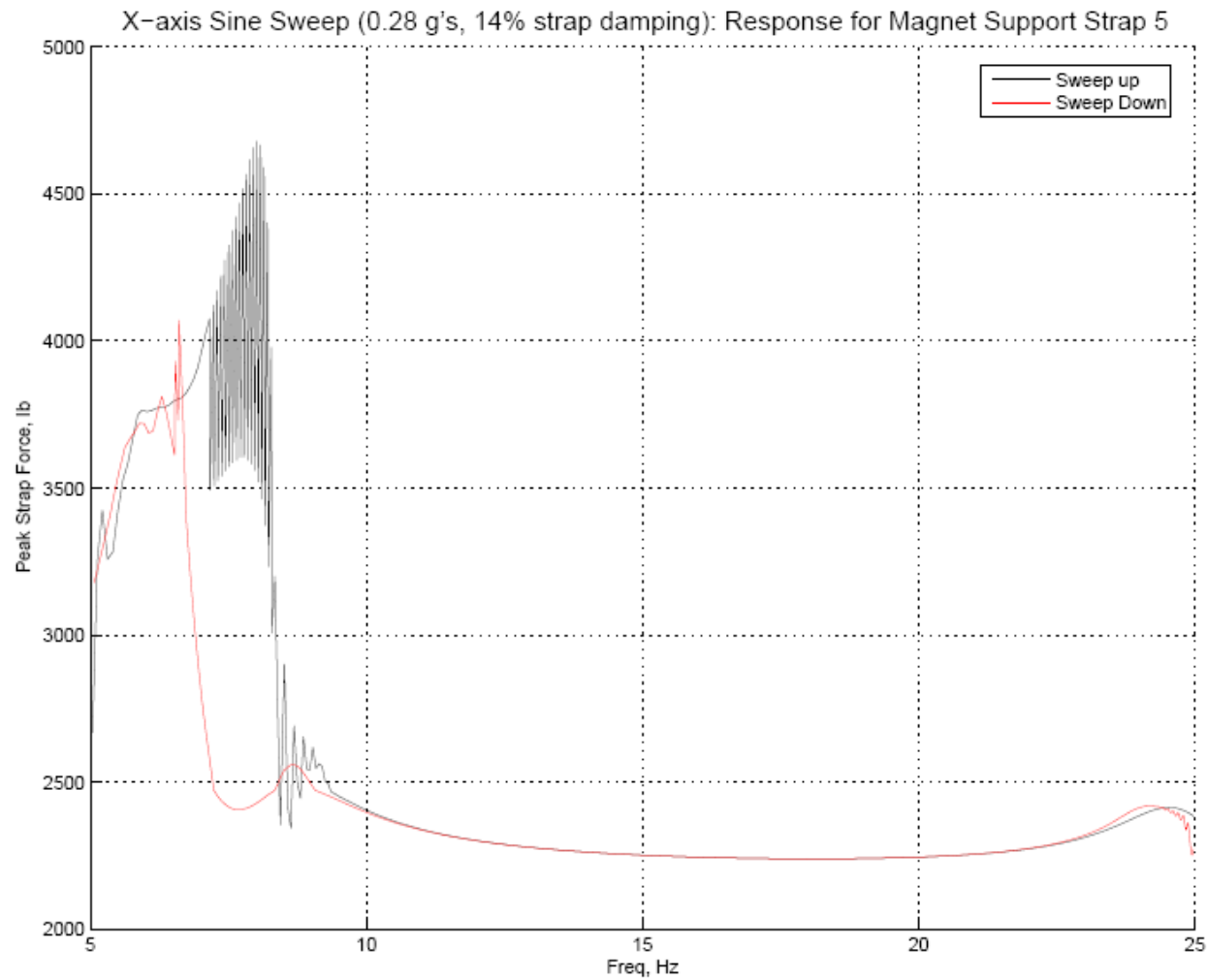


Figure 9-128 Strap 4 frequency response envelope for x-axis 0.28 g excitation



**Figure 9-129 Strap 5 frequency response envelope for x-axis 0.28 g excitation**

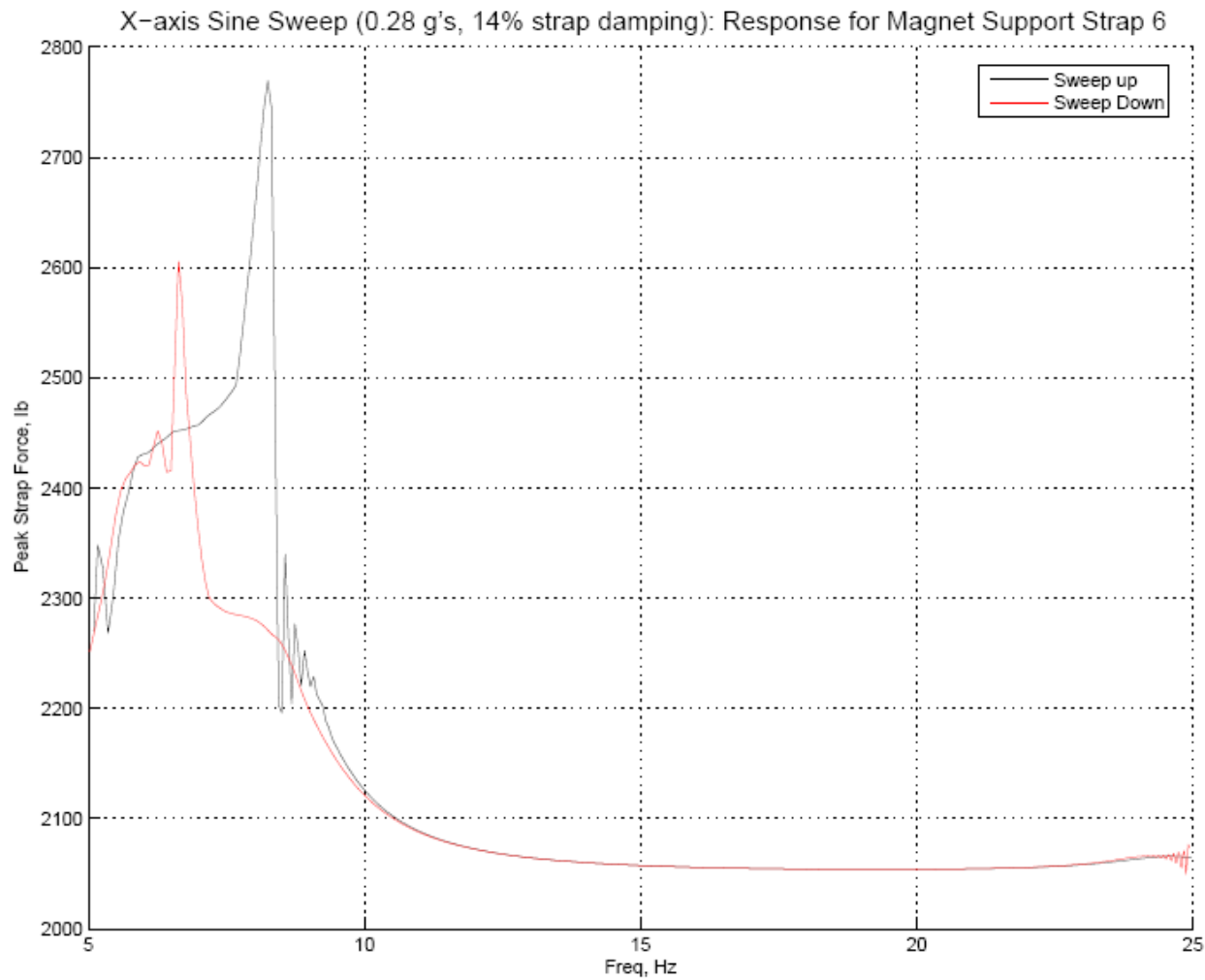


Figure 9-130 Strap 6 frequency response envelope for x-axis 0.28 g excitation

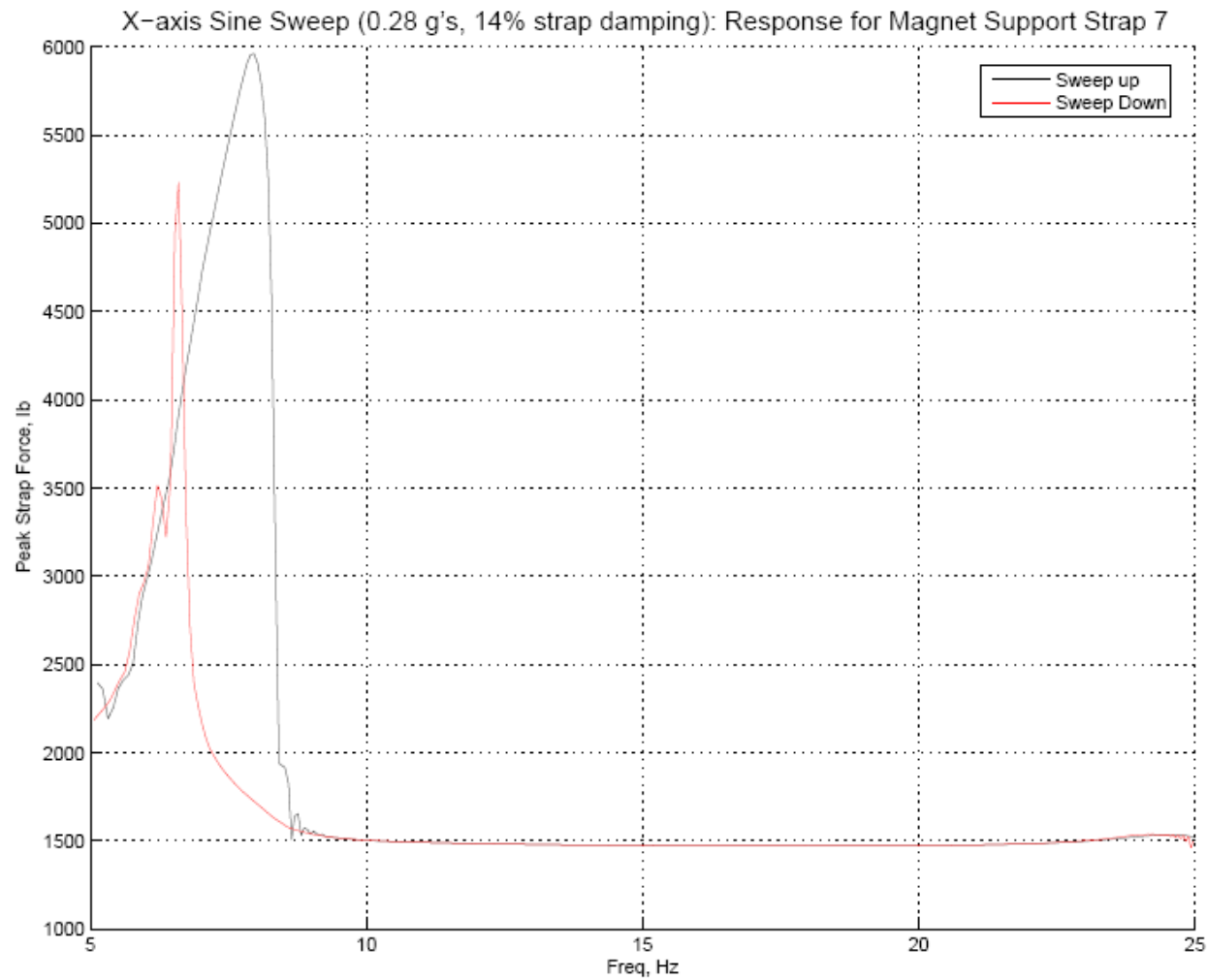


Figure 9-131 Strap 7 frequency response envelope for x-axis 0.28 g excitation

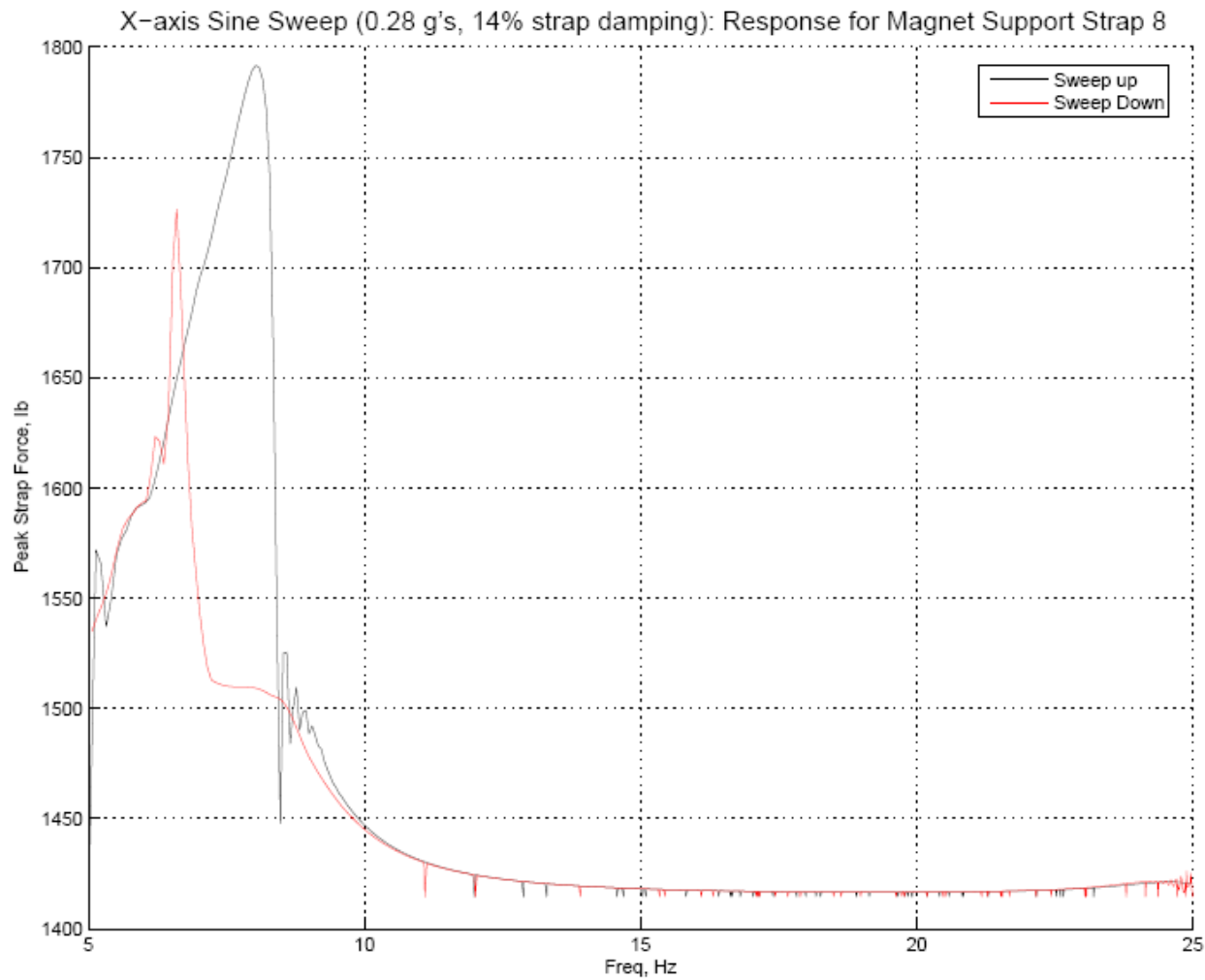


Figure 9-132 Strap 8 frequency response envelope for x-axis 0.28 g excitation

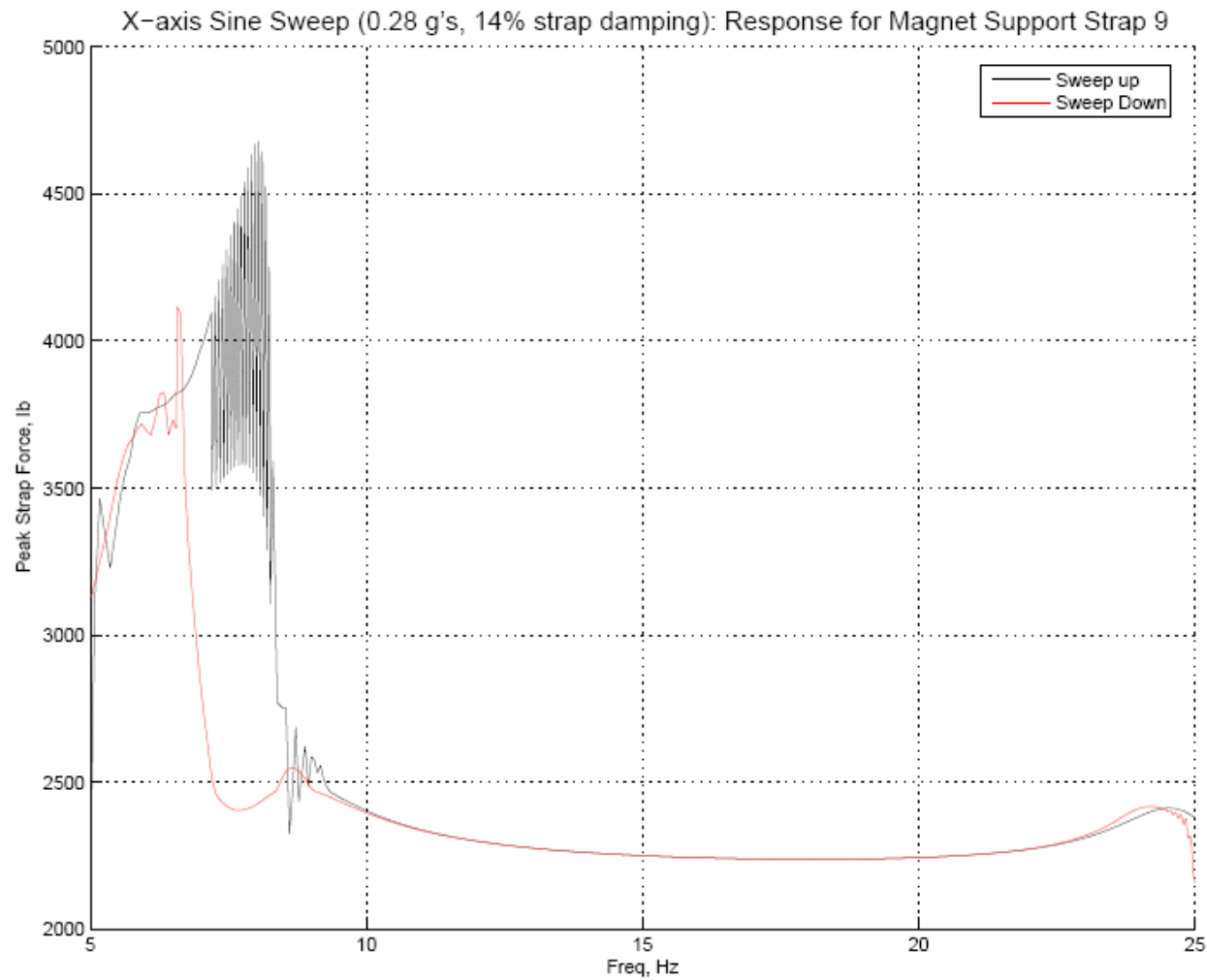


Figure 9-133 Strap 9 frequency response envelope for x-axis 0.28 g excitation



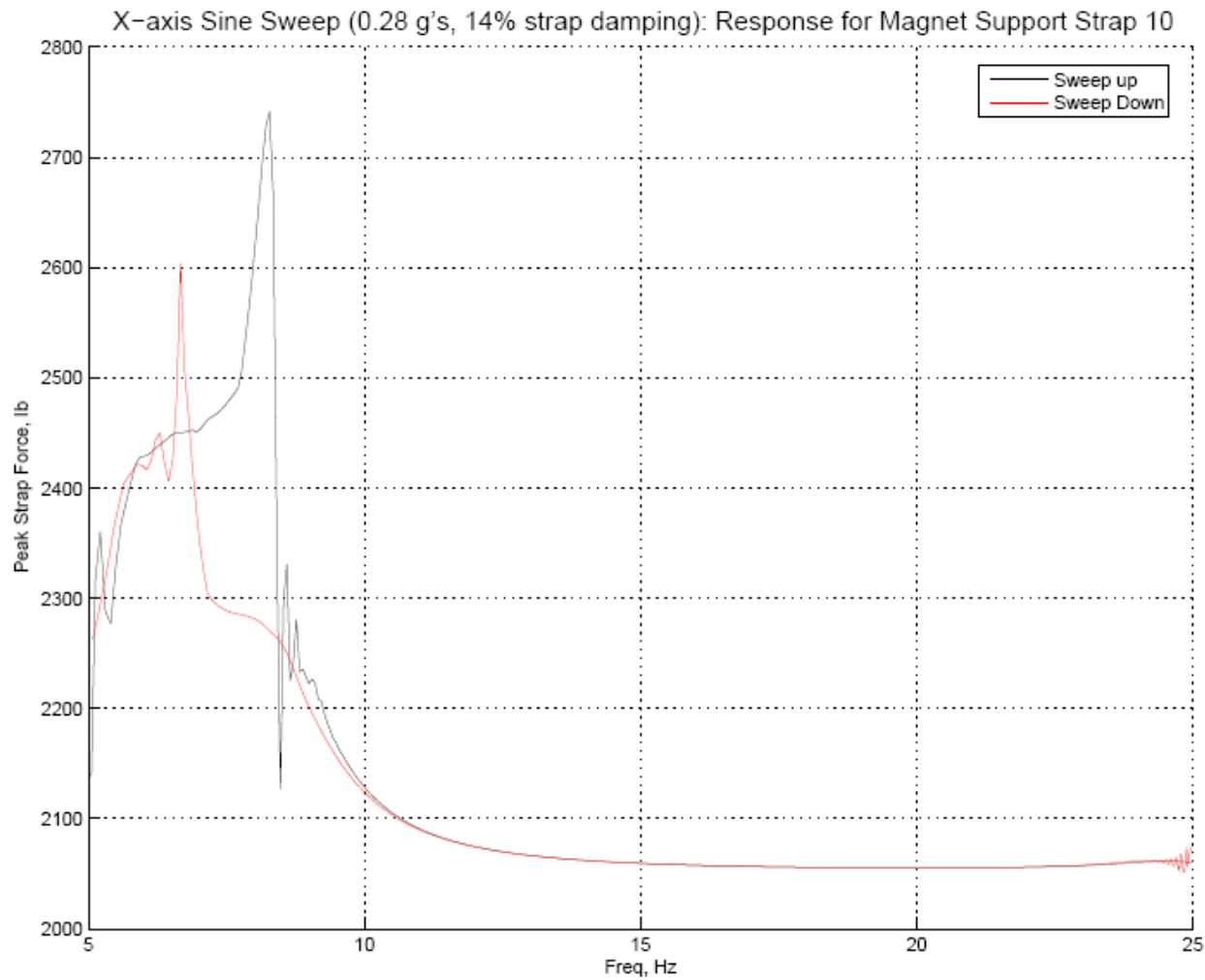


Figure 9-134 Strap 10 frequency response envelope for x-axis 0.28 g excitation

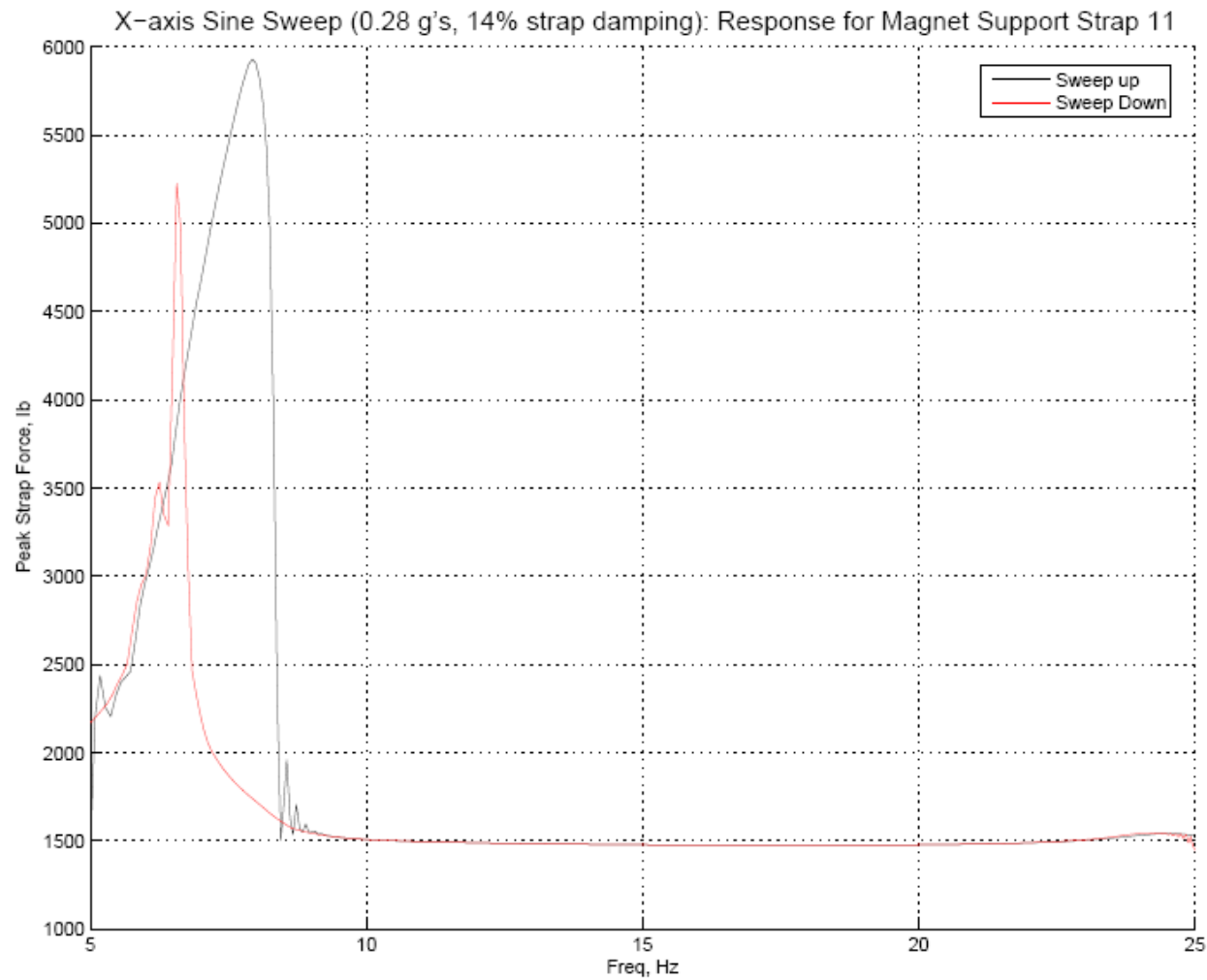


Figure 9-135 Strap 11 frequency response envelope for x-axis 0.28 g excitation

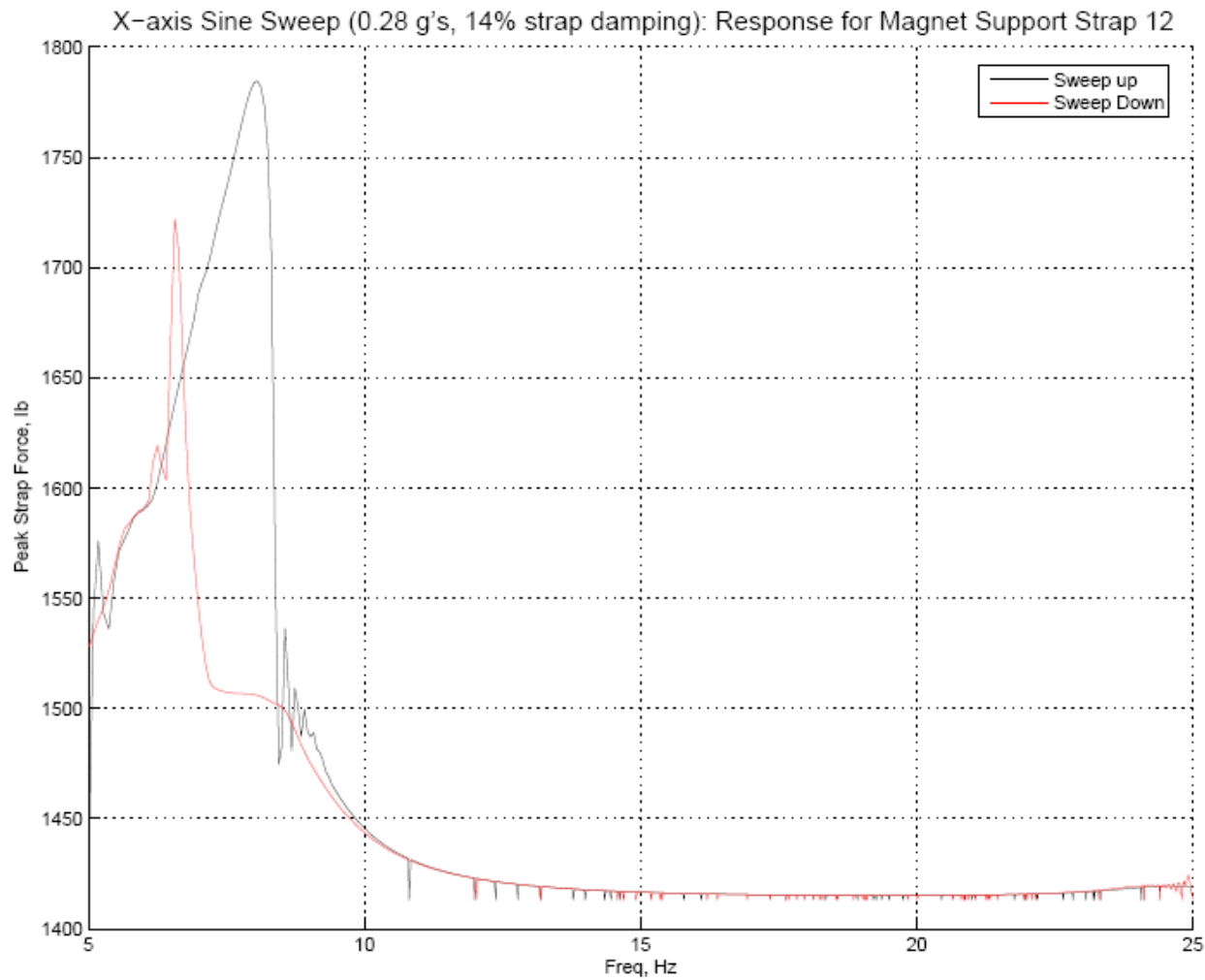


Figure 9-136 Strap 12 frequency response envelope for x-axis 0.28 g excitation

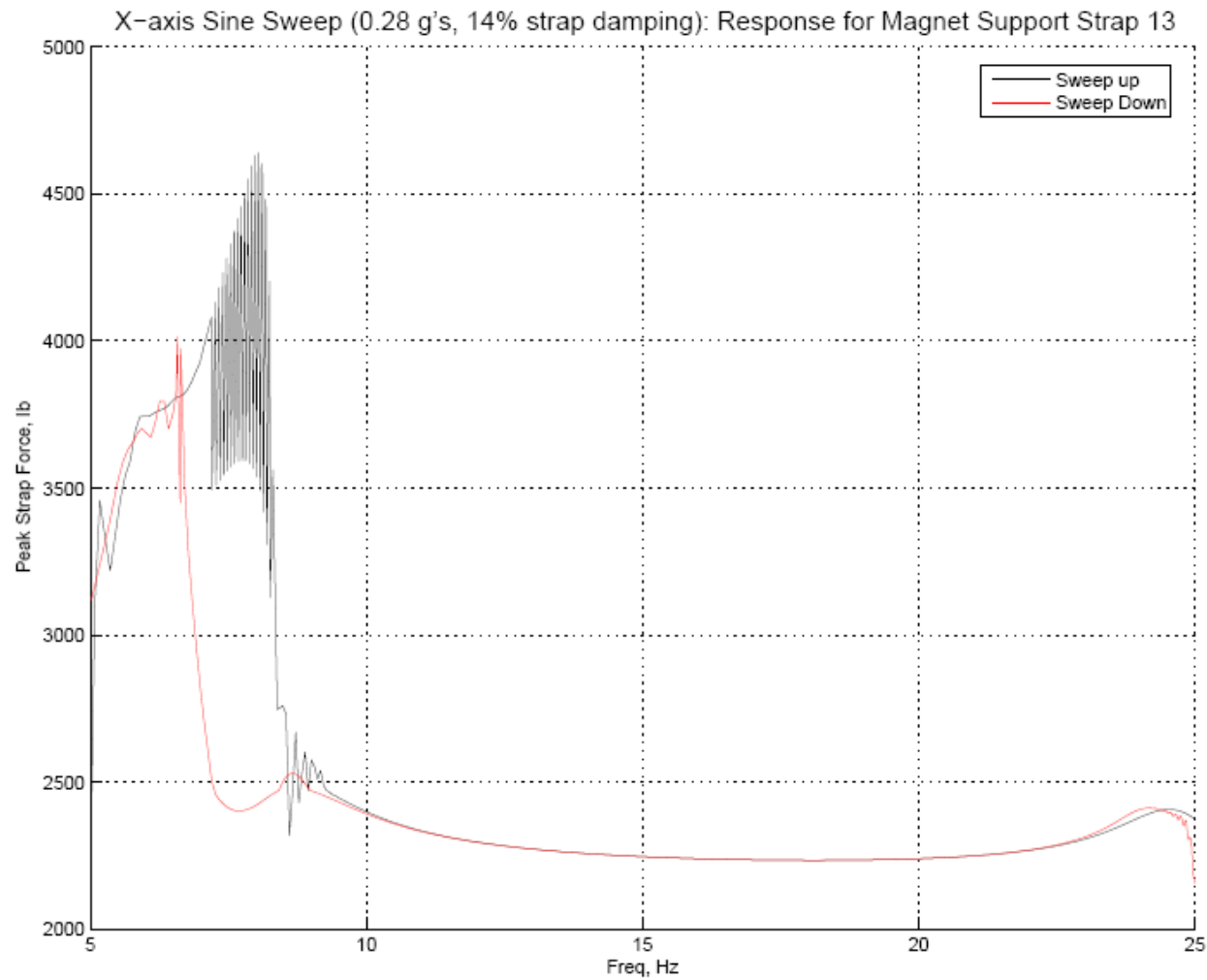


Figure 9-137 Strap 13 frequency response envelope for x-axis 0.28 g excitation

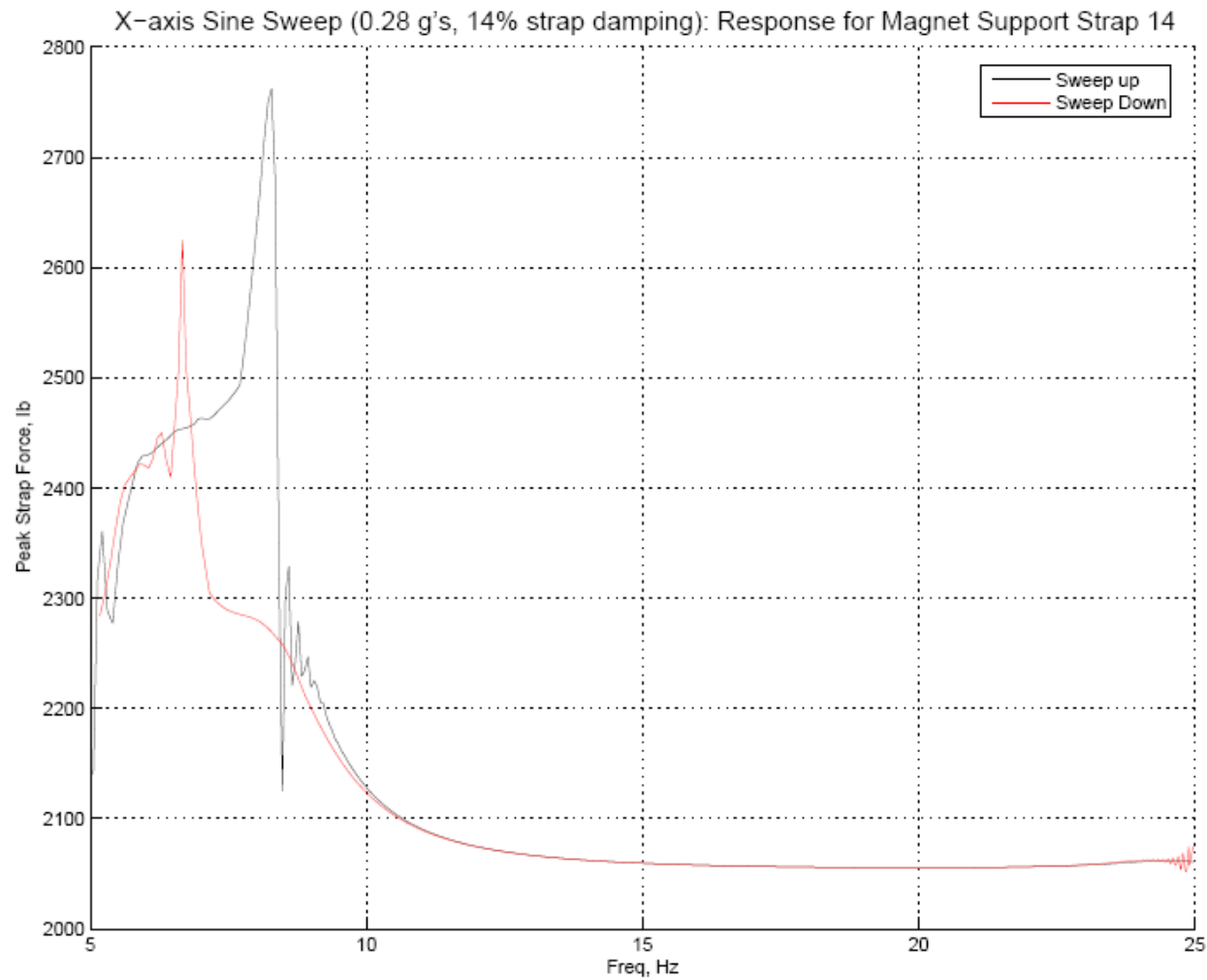


Figure 9-138 Strap 14 frequency response envelope for x-axis 0.28 g excitation

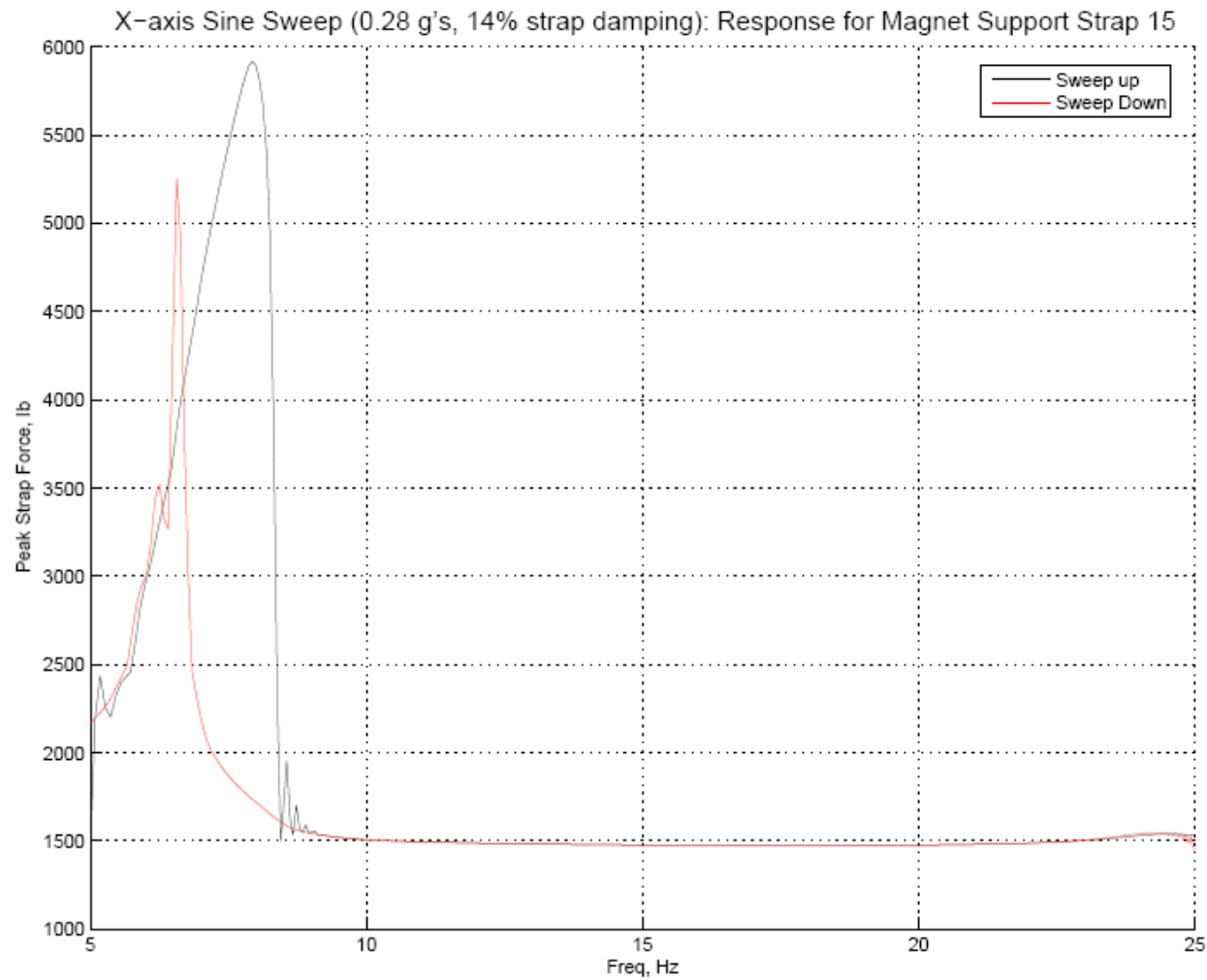


Figure 9-139 Strap 15 frequency response envelope for x-axis 0.28 g excitation

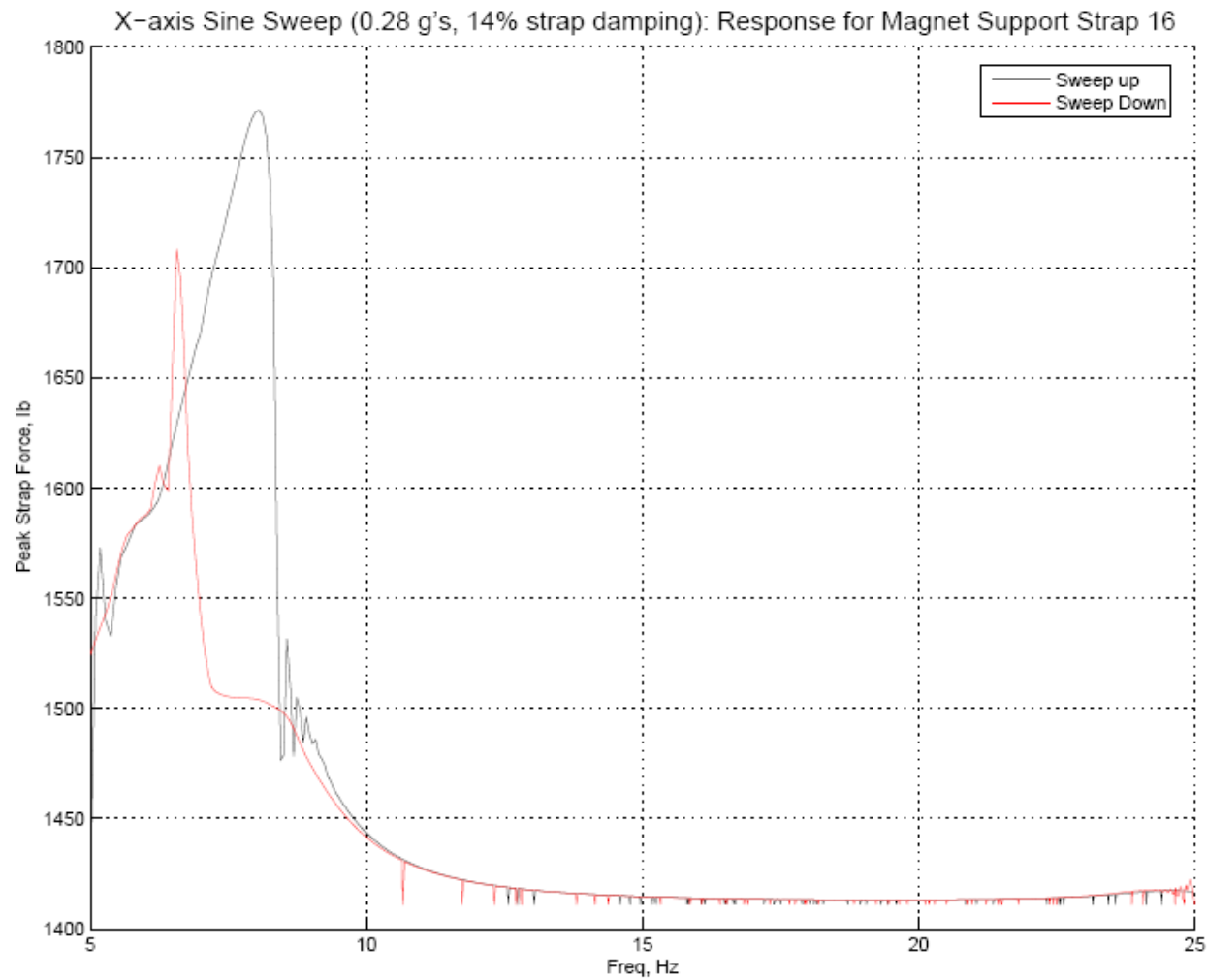


Figure 9-140 Strap 16 frequency response envelope for x-axis 0.28 g excitation

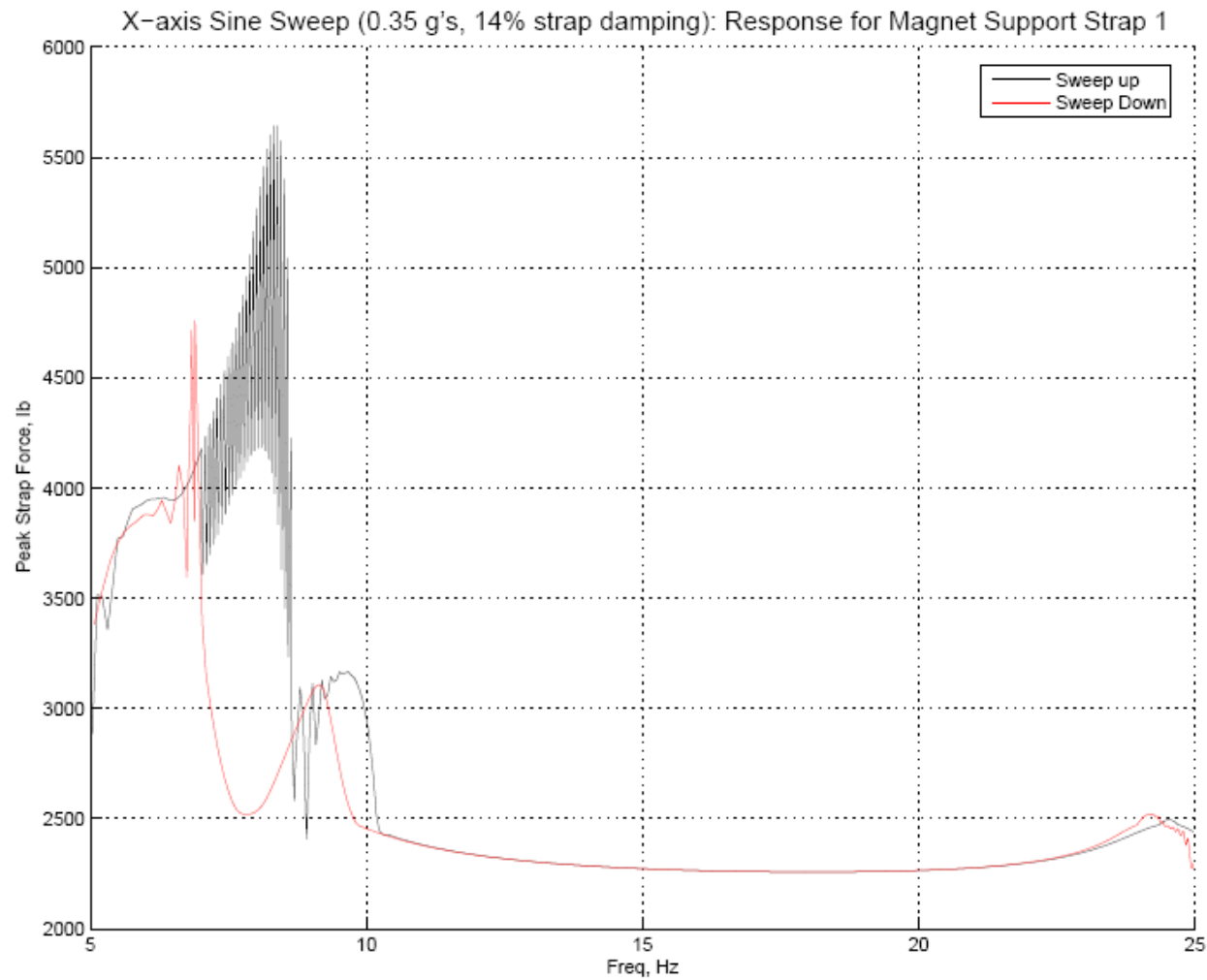


Figure 9-141 Strap 1 frequency response envelope for x-axis 0.35 g excitation



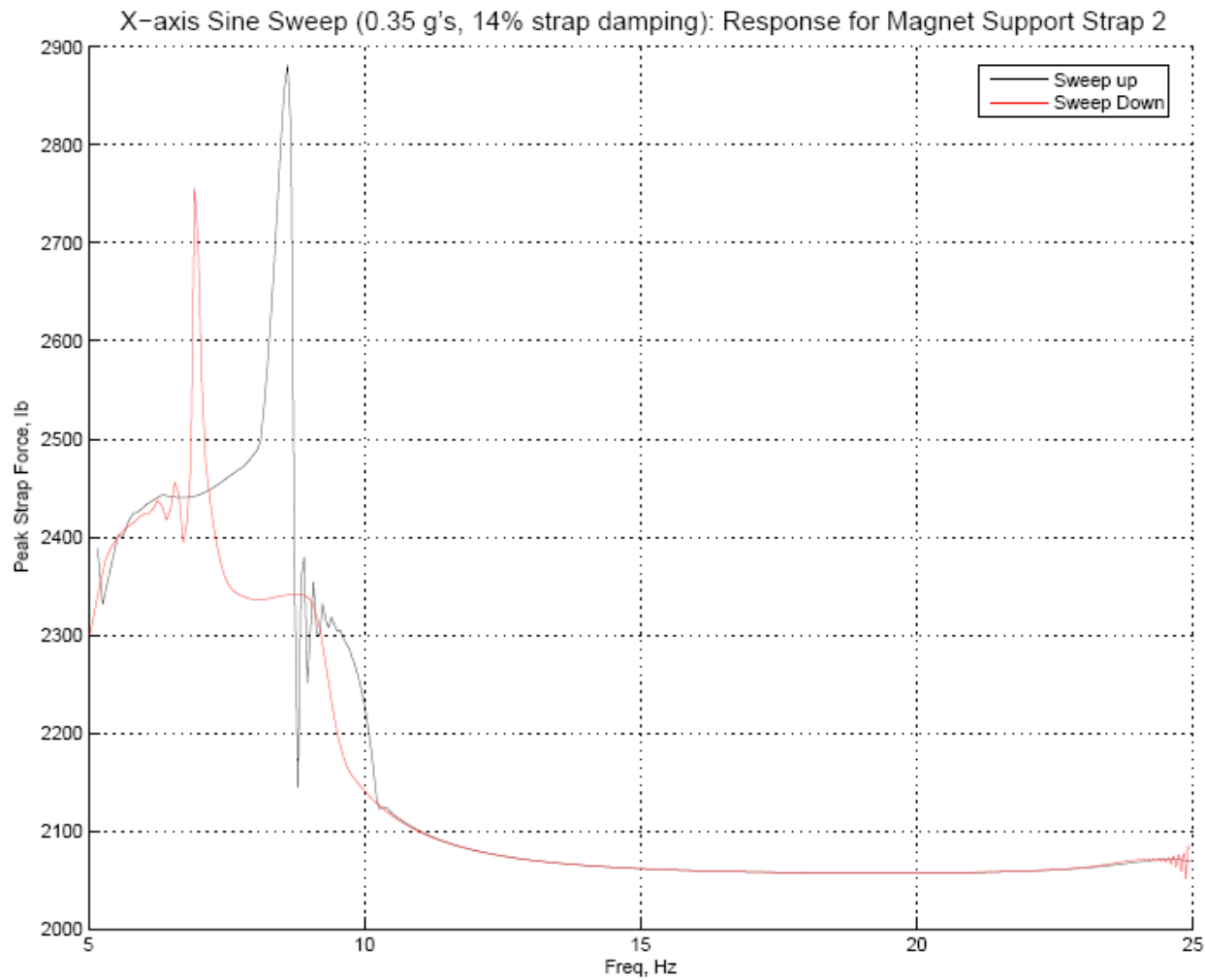


Figure 9-142 Strap 2 frequency response envelope for x-axis 0.35 g excitation

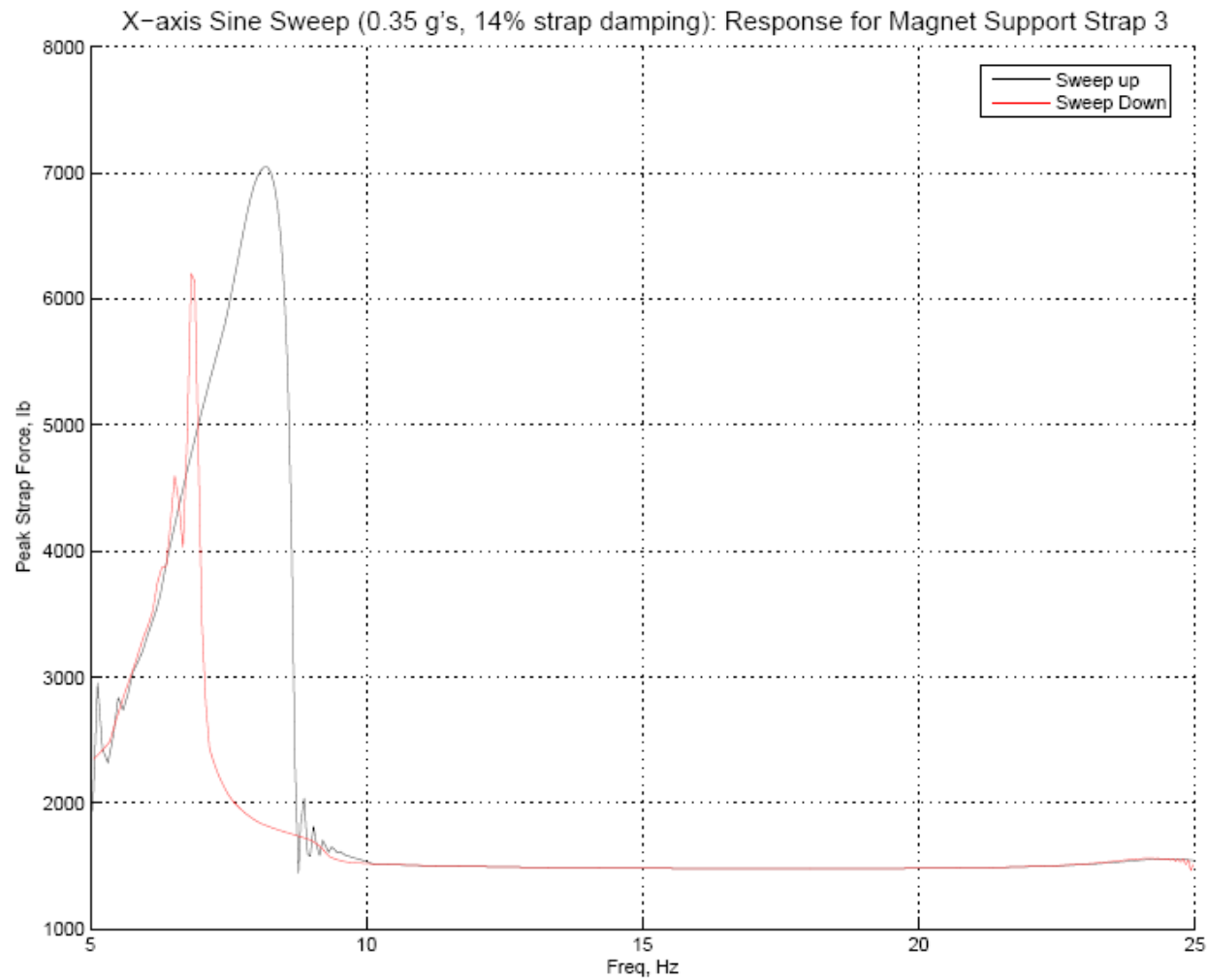


Figure 9-143 Strap 3 frequency response envelope for x-axis 0.35 g excitation

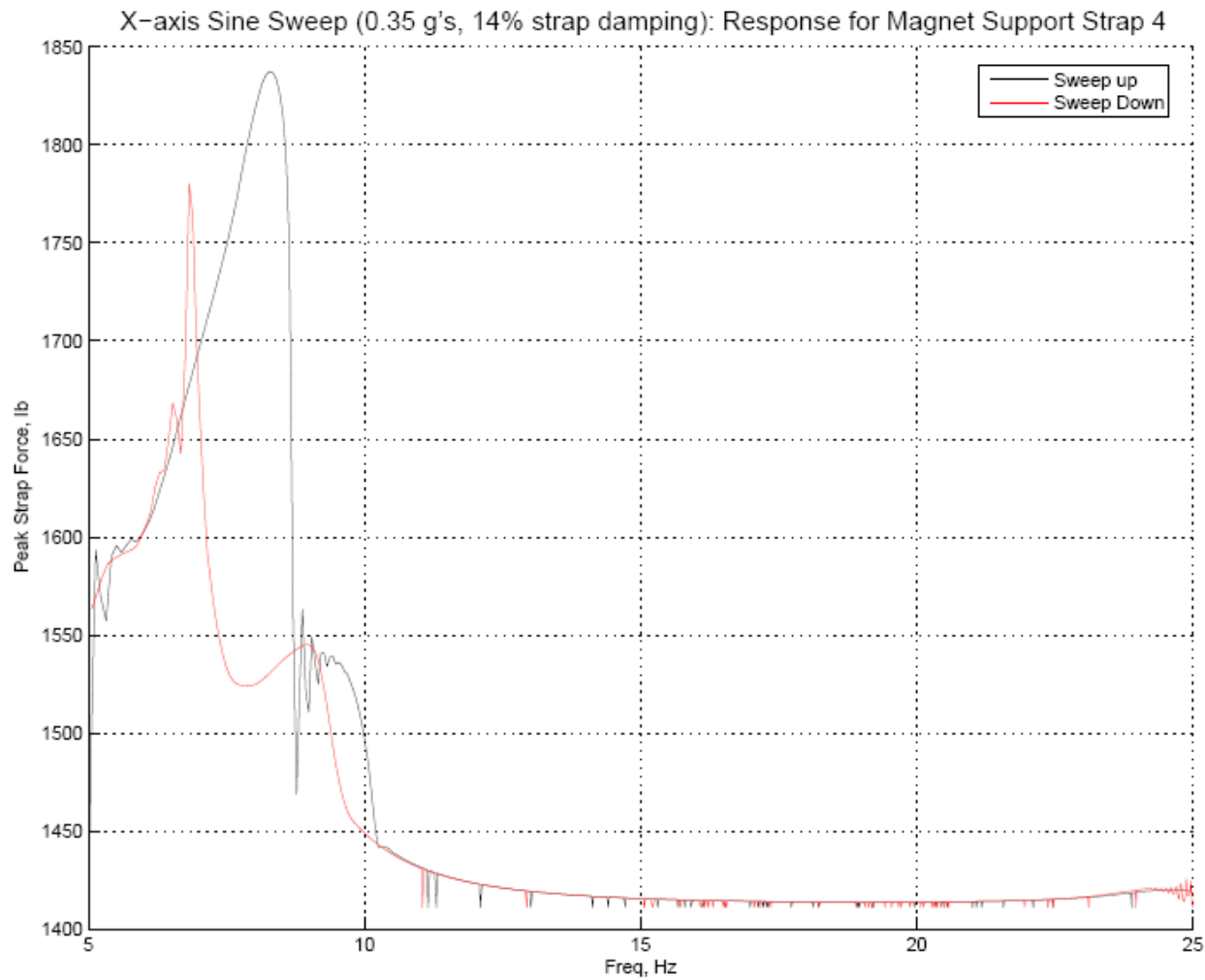


Figure 9-144 Strap 4 frequency response envelope for x-axis 0.35 g excitation

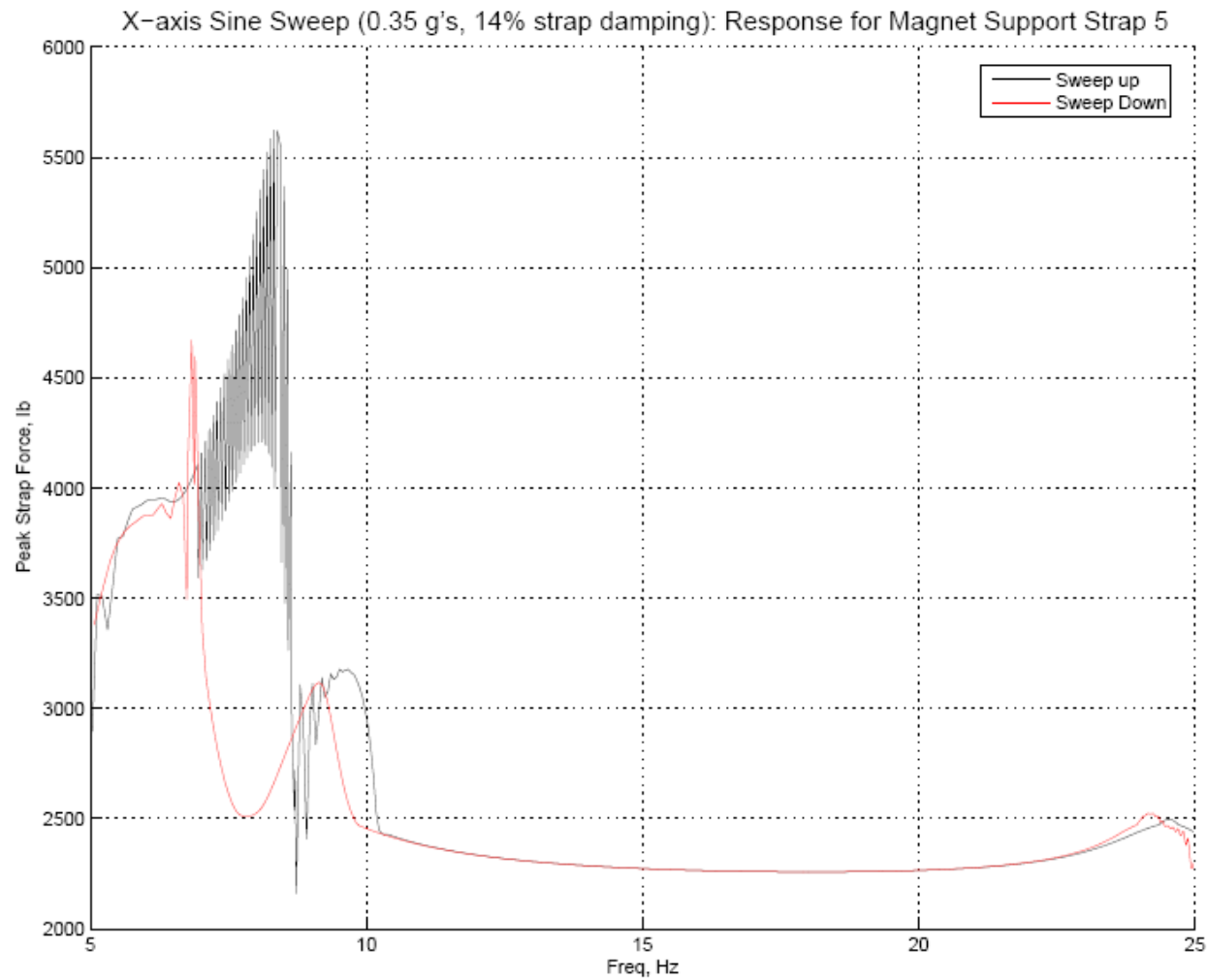


Figure 9-145 Strap 5 frequency response envelope for x-axis 0.35 g excitation

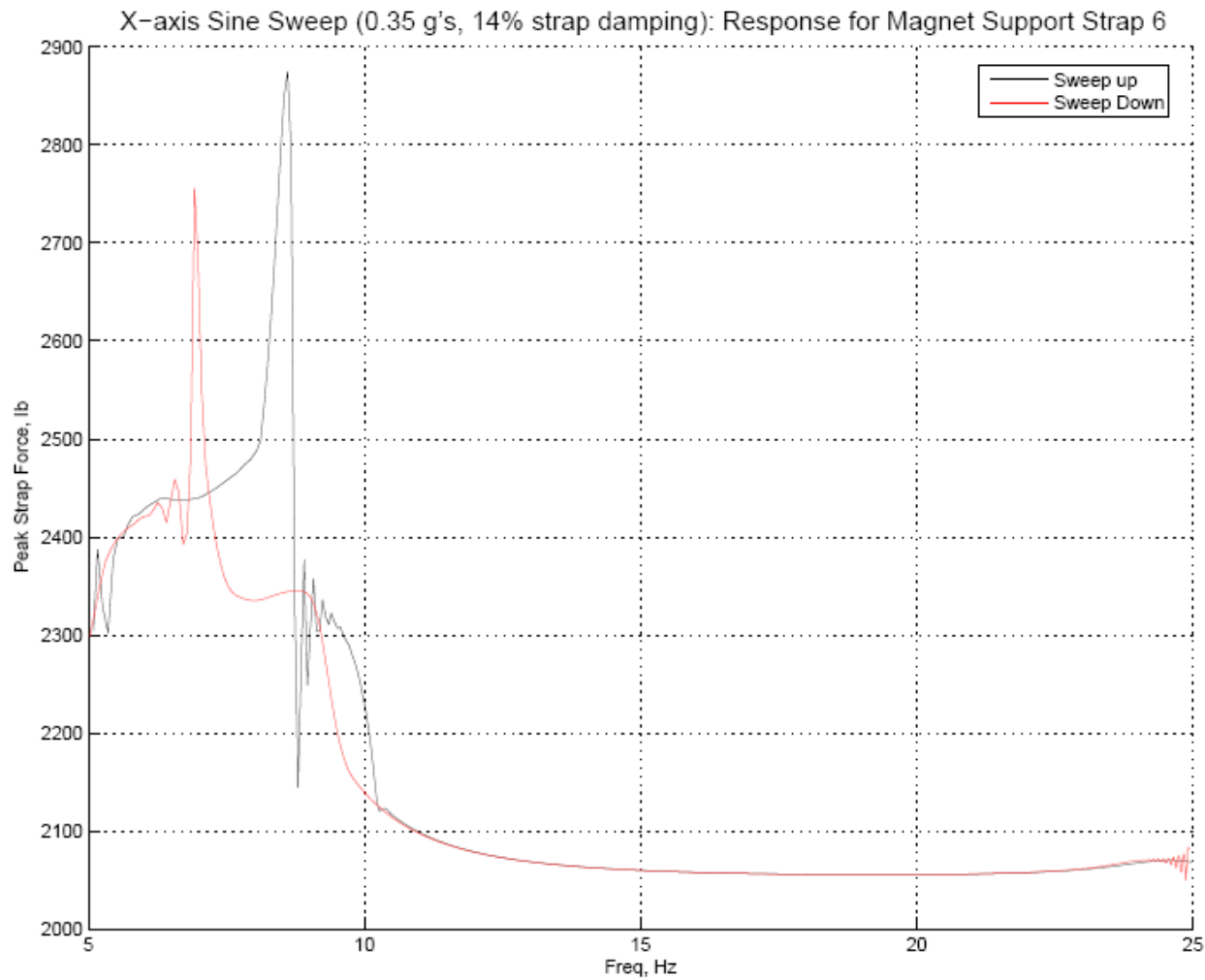


Figure 9-146 Strap 6 frequency response envelope for x-axis 0.35 g excitation

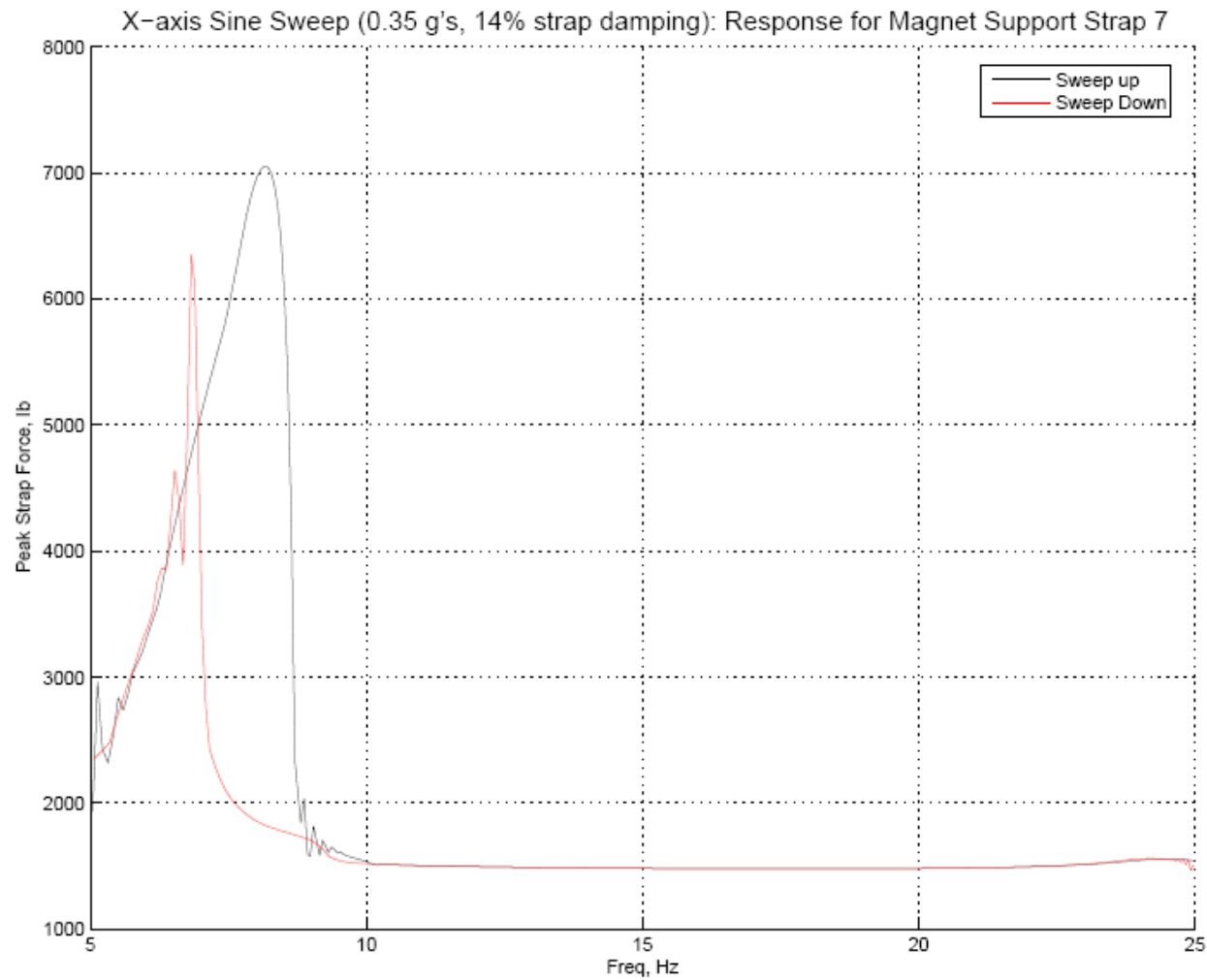


Figure 9-147 Strap 7 frequency response envelope for x-axis 0.35 g excitation

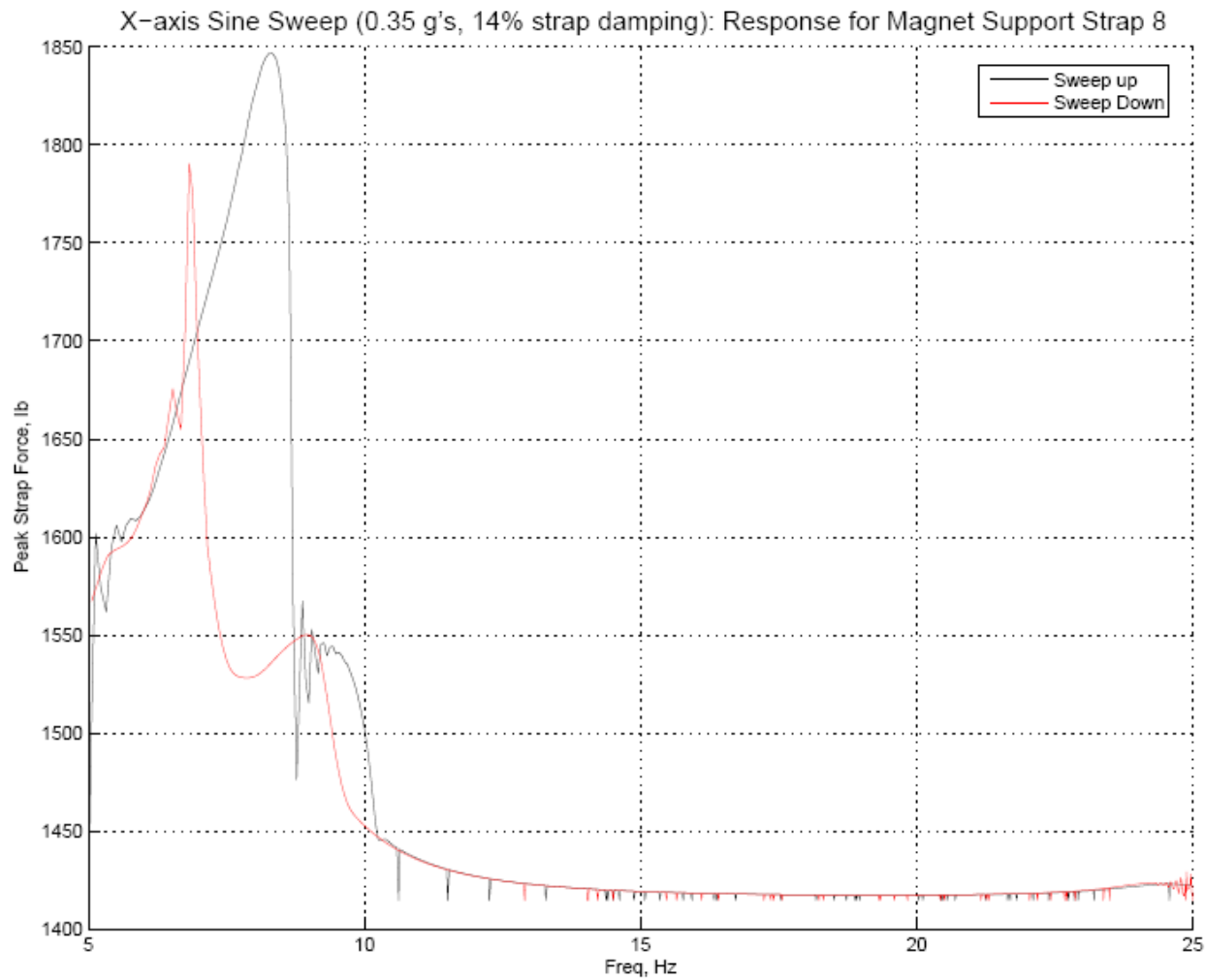


Figure 9-148 Strap 8 frequency response envelope for x-axis 0.35 g excitation

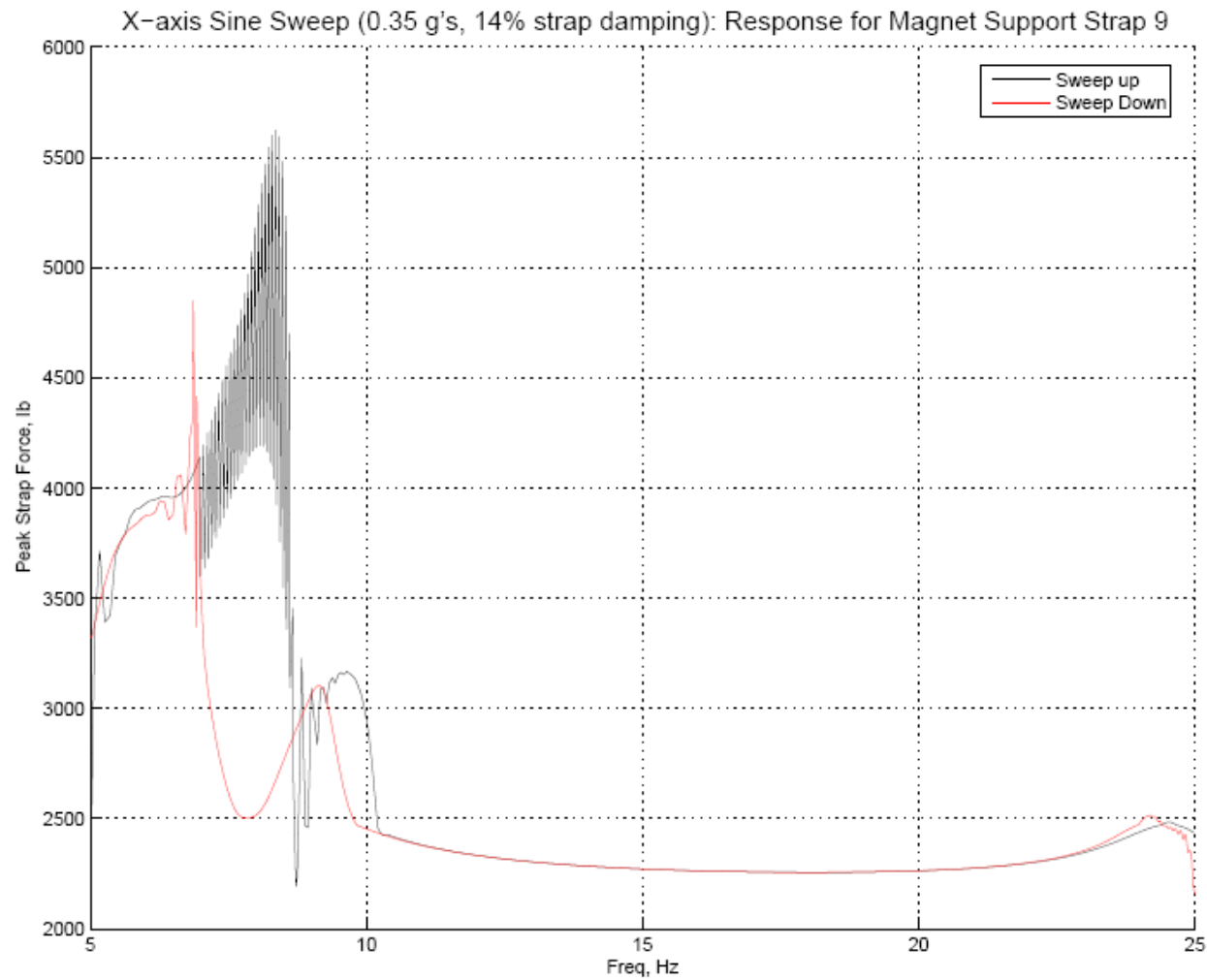
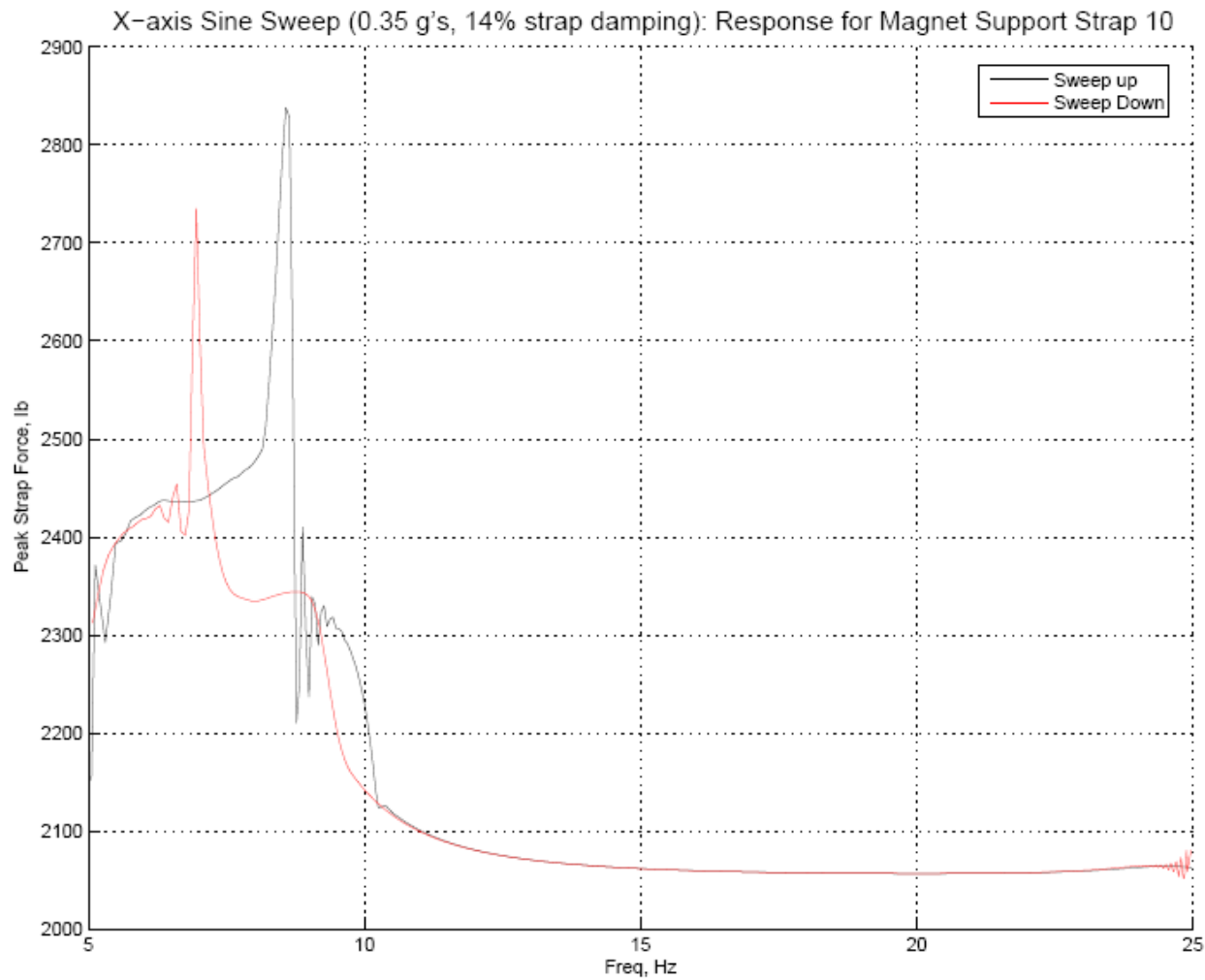


Figure 9-149 Strap 9 frequency response envelope for x-axis 0.35 g excitation





**Figure 9-150** Strap 10 frequency response envelope for x-axis 0.35 g excitation

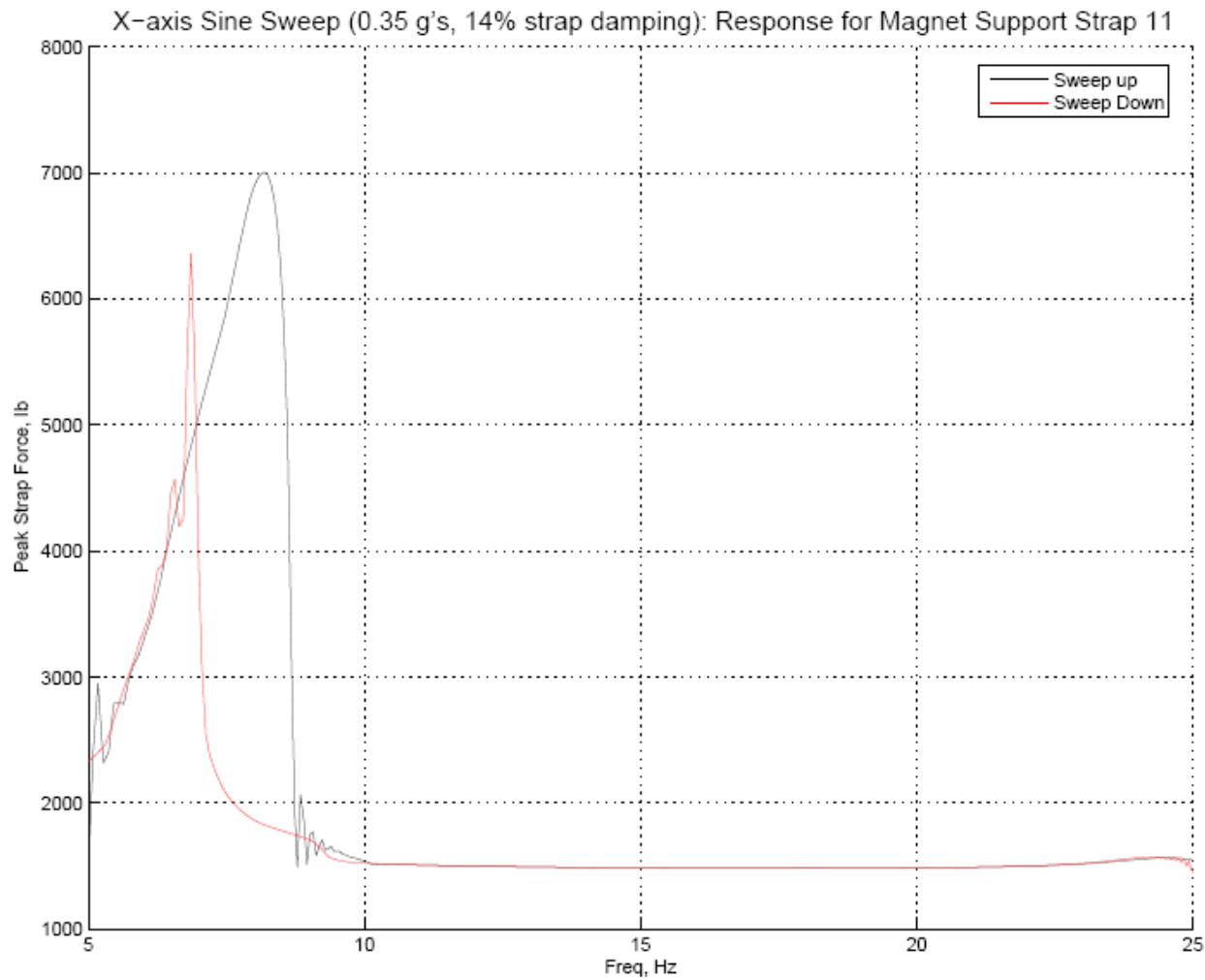


Figure 9-151 Strap 11 frequency response envelope for x-axis 0.35 g excitation

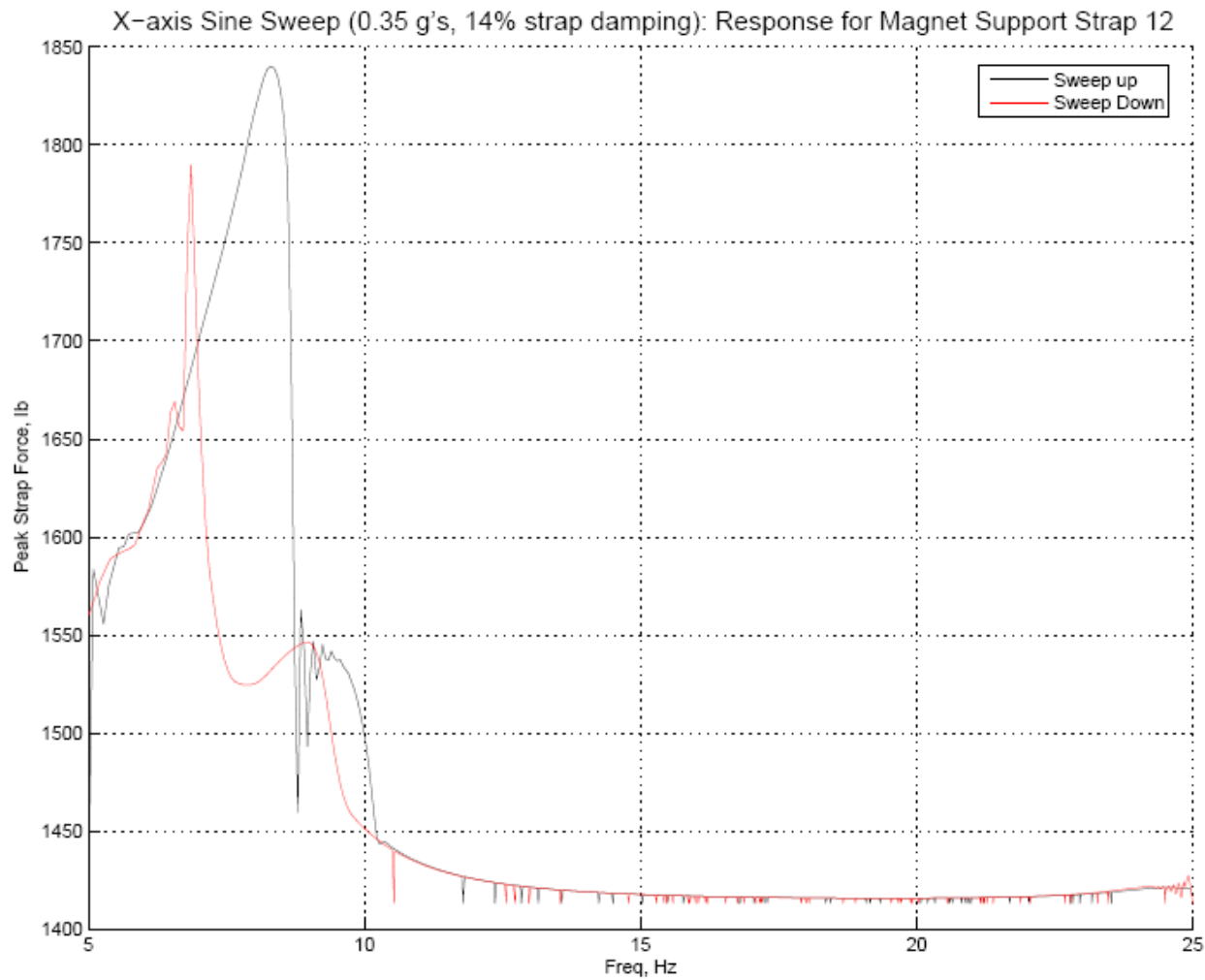


Figure 9-152 Strap 12 frequency response envelope for x-axis 0.35 g excitation

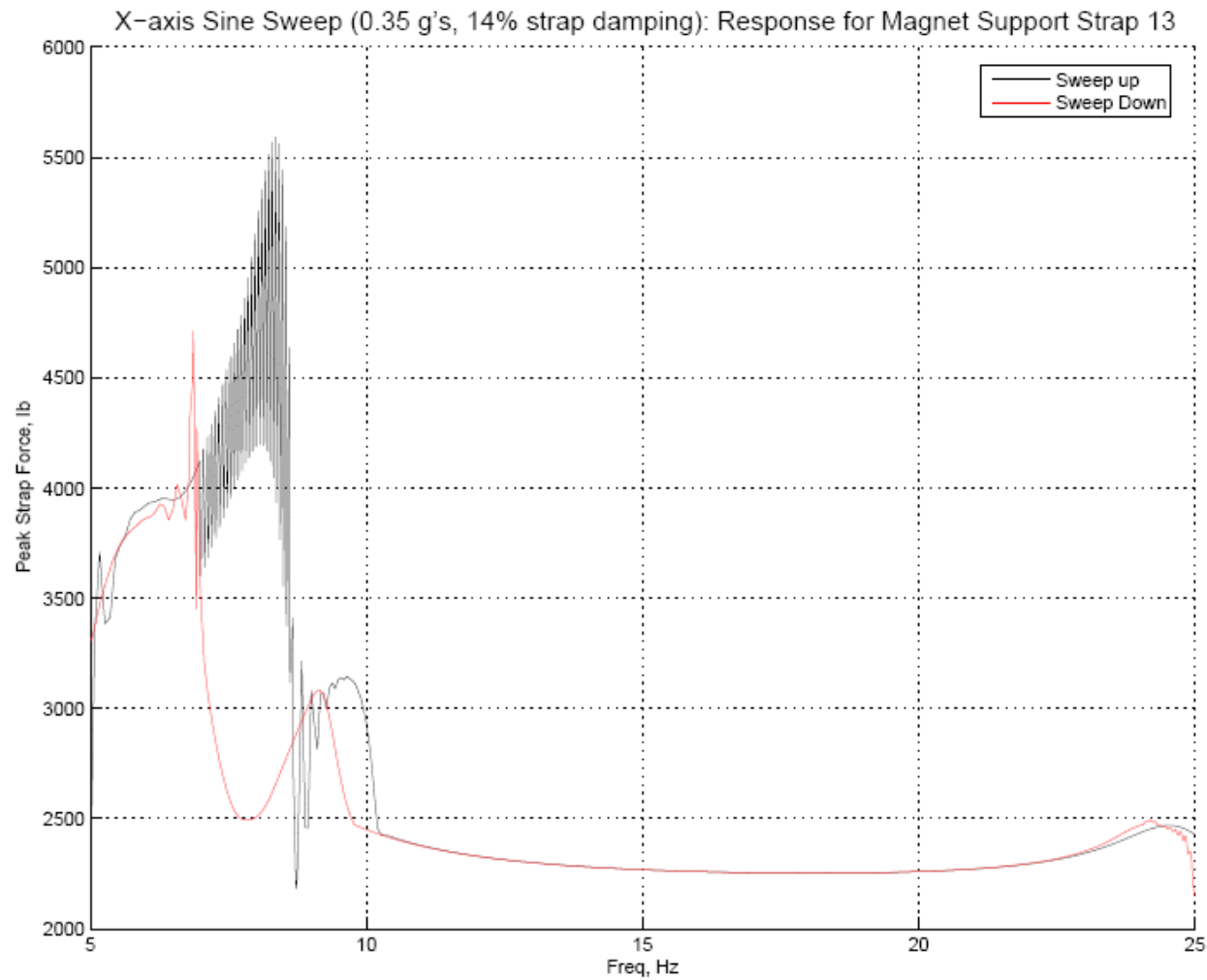


Figure 9-153 Strap 13 frequency response envelope for x-axis 0.35 g excitation

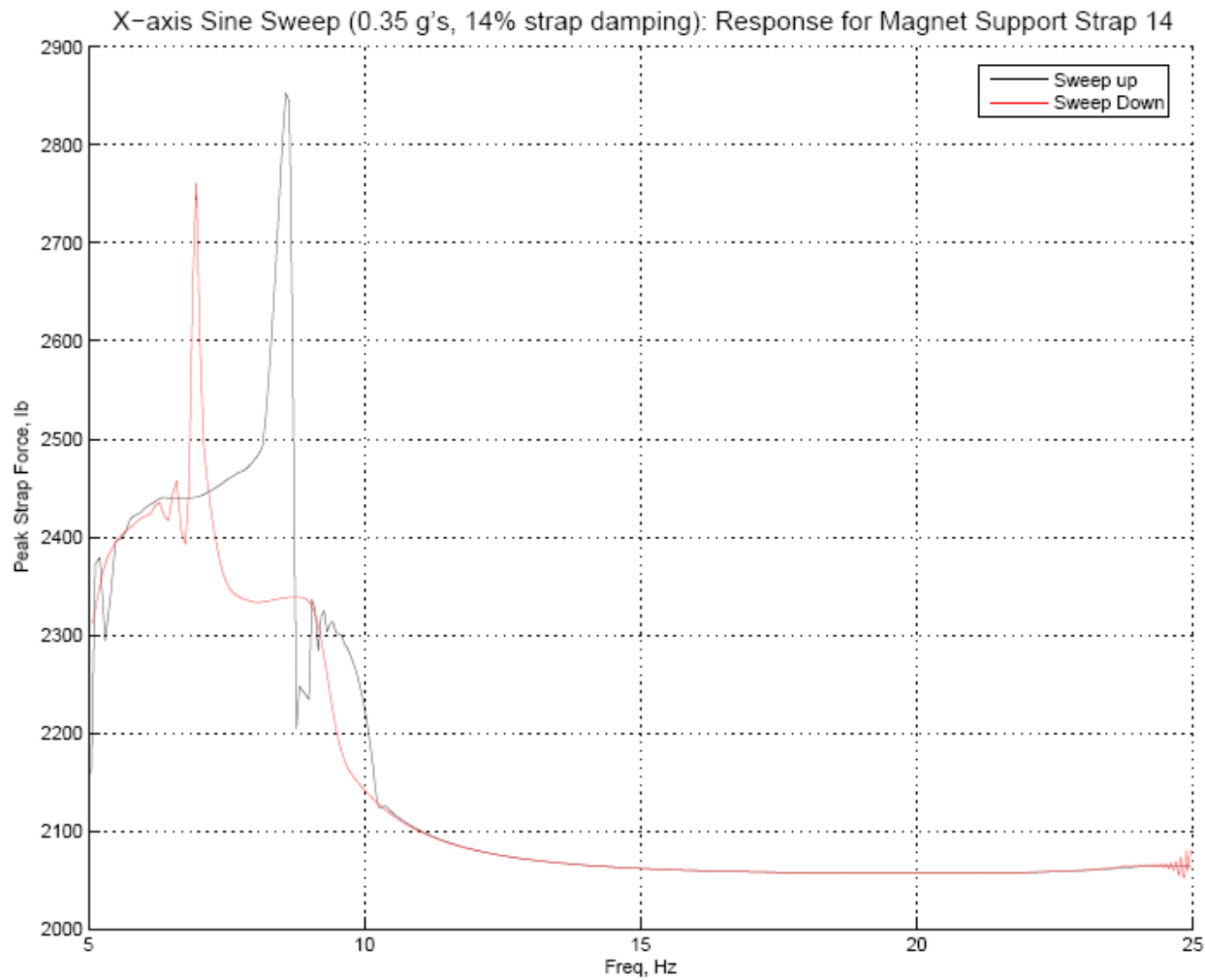


Figure 9-154 Strap 14 frequency response envelope for x-axis 0.35 g excitation

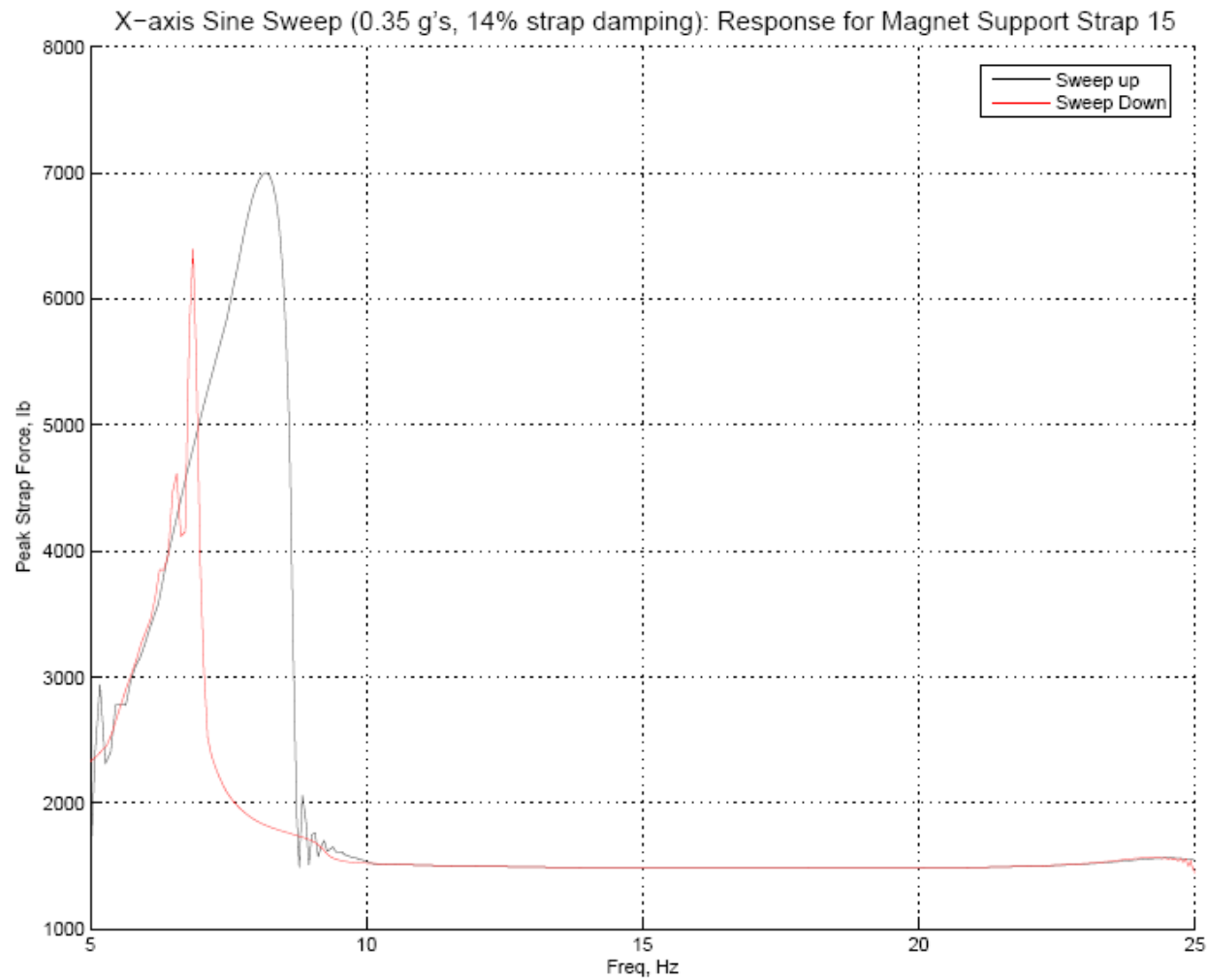


Figure 9-155 Strap 15 frequency response envelope for x-axis 0.35 g excitation

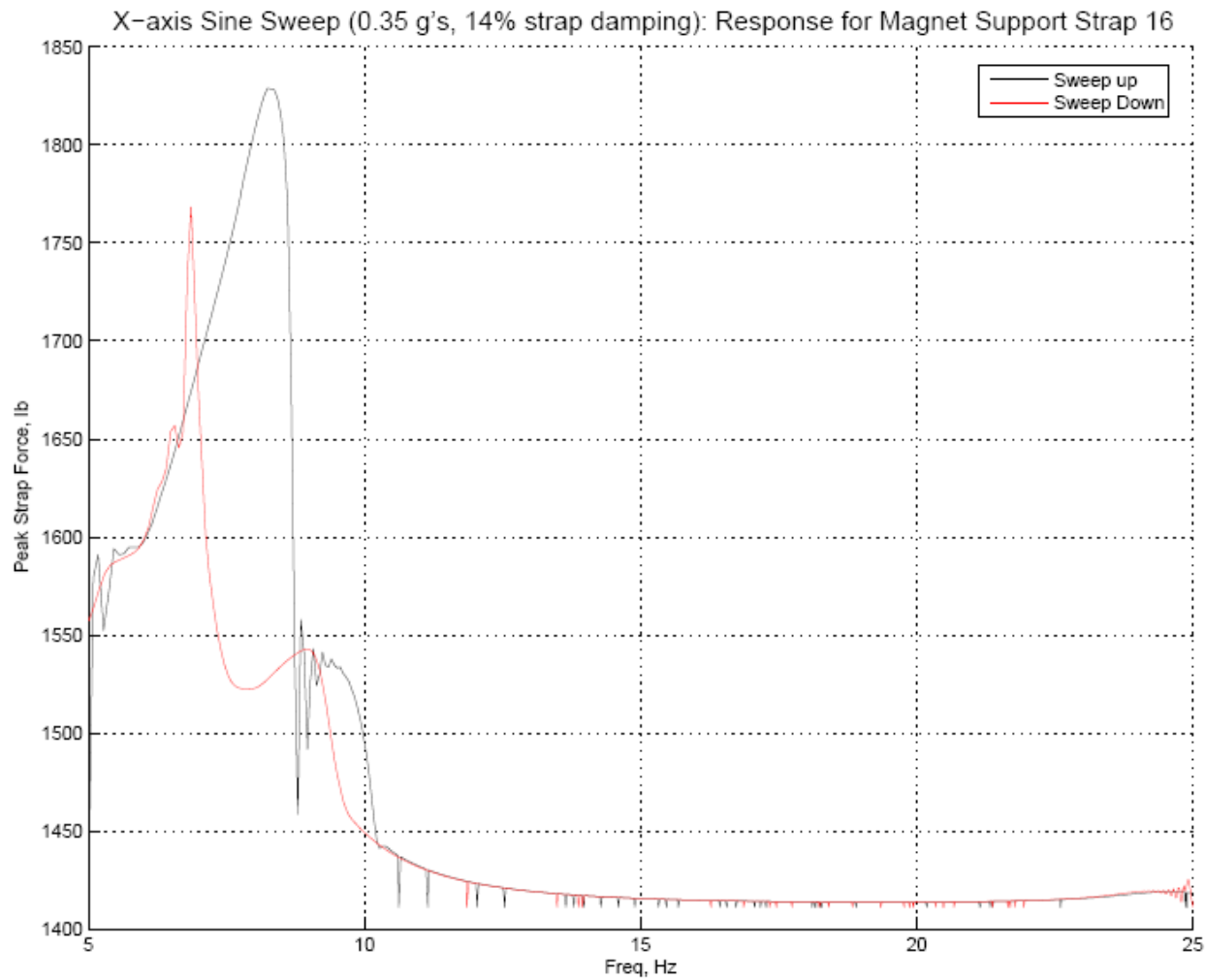
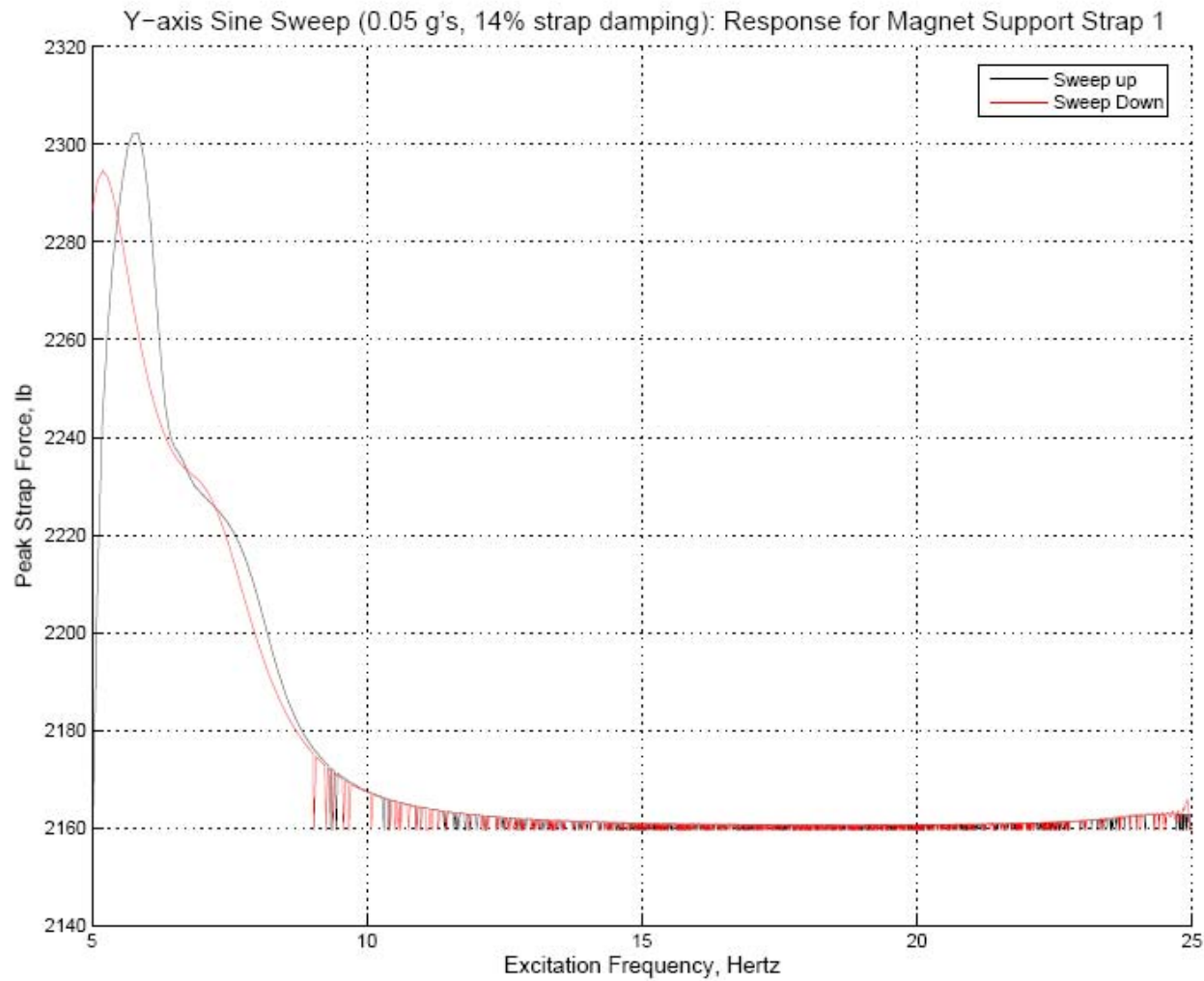


Figure 9-156 Strap 16 frequency response envelope for x-axis 0.35 g excitation



**Figure 9-157** Strap 1 frequency response envelope for y-axis 0.05 g excitation



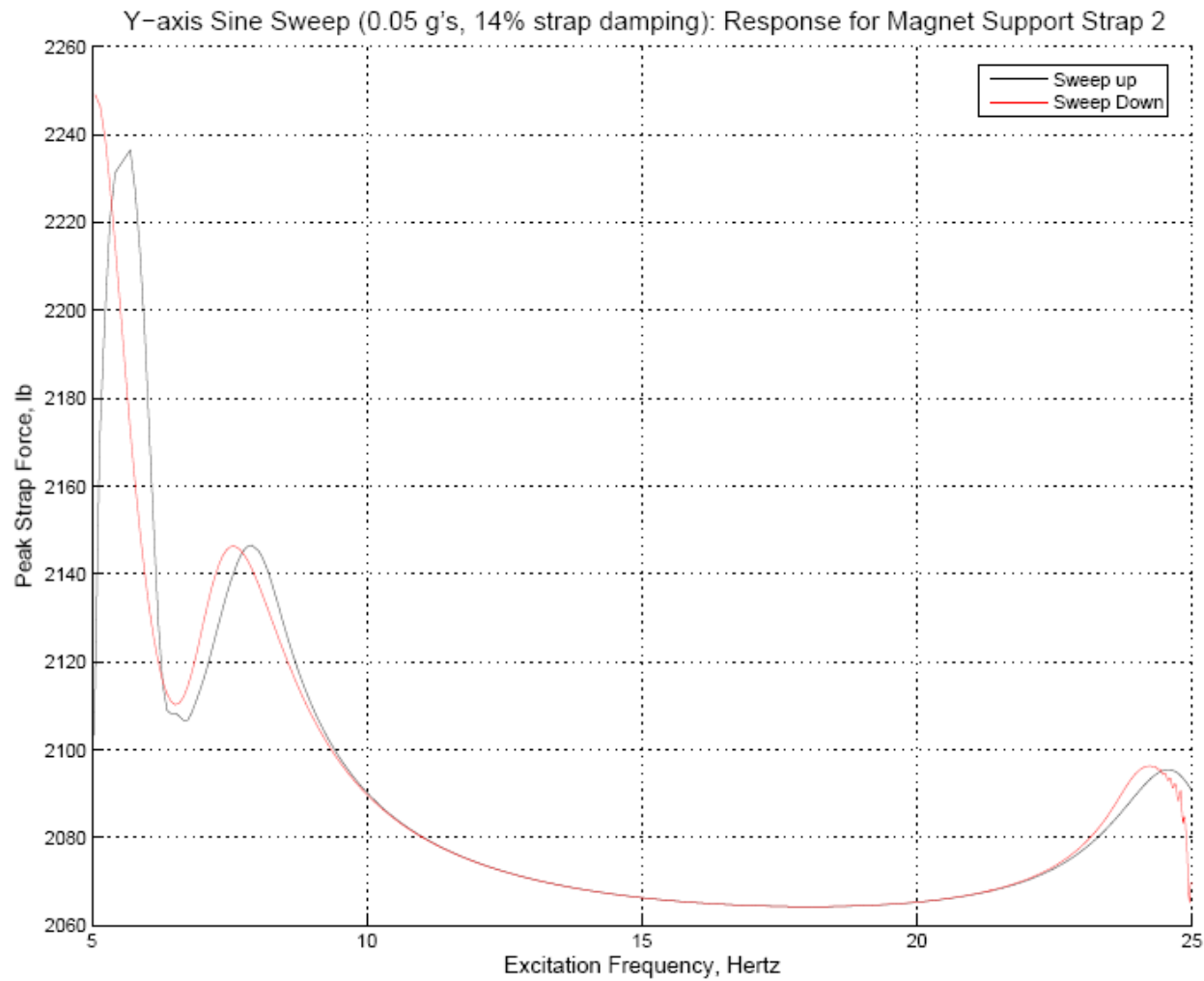
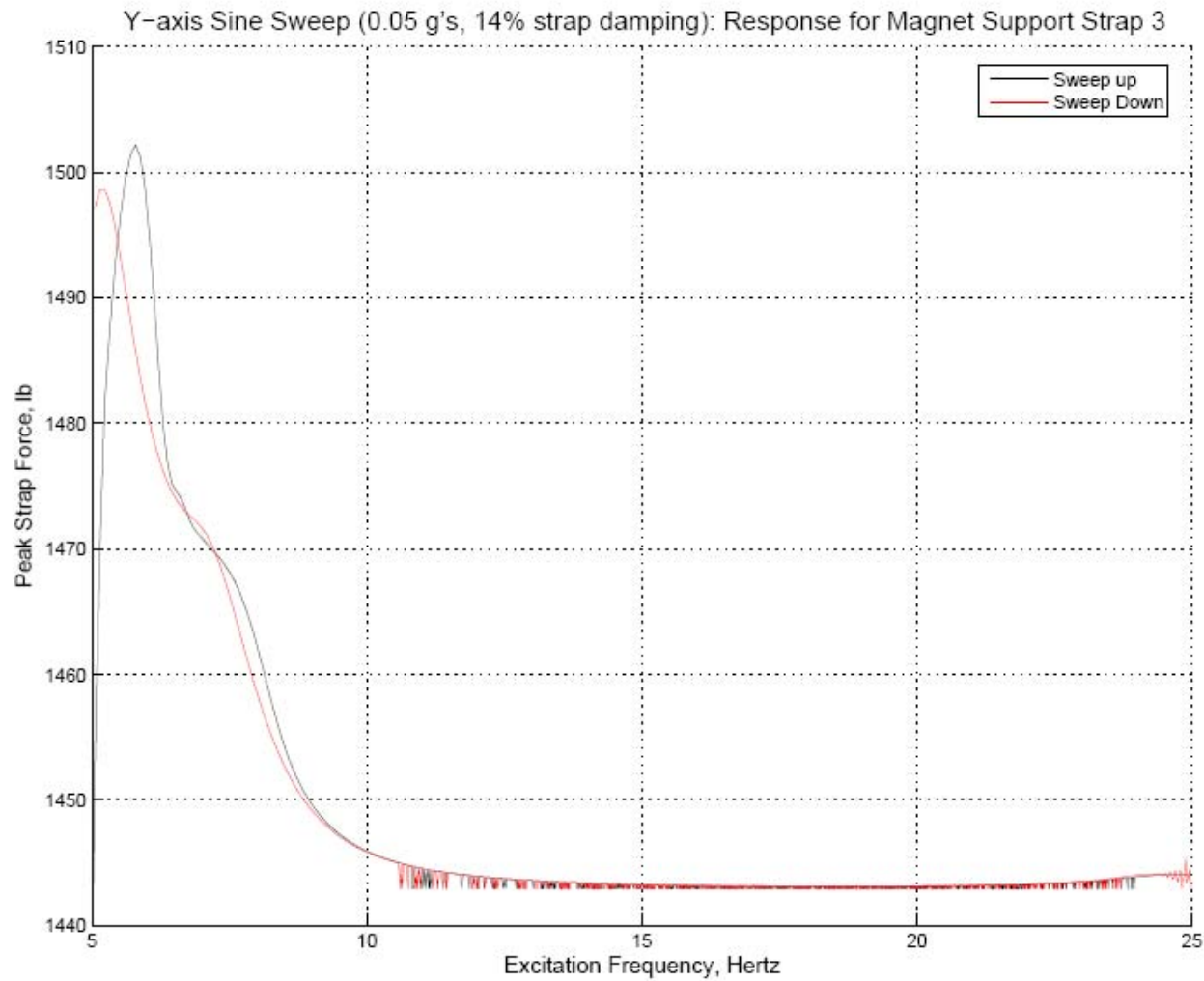
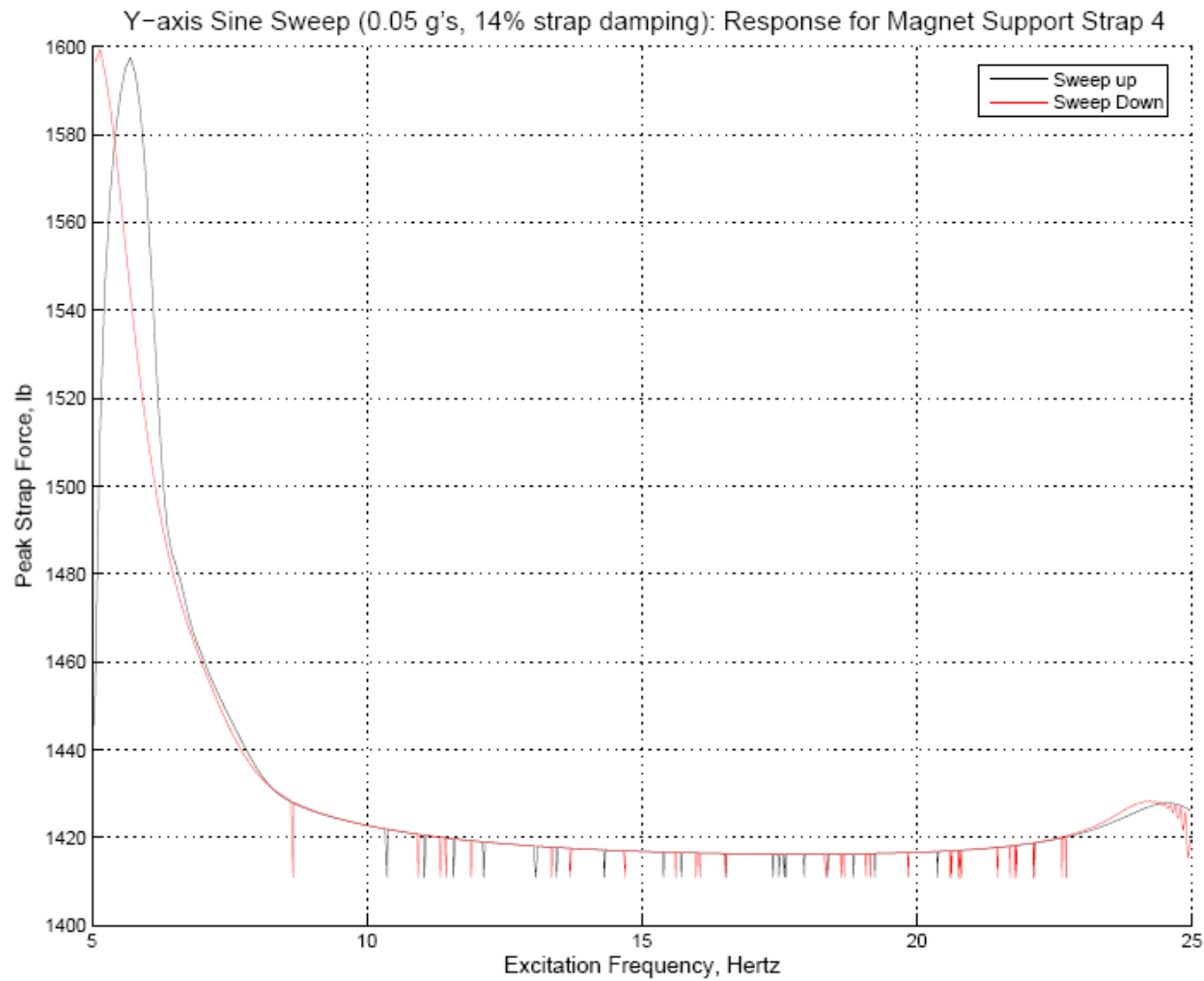


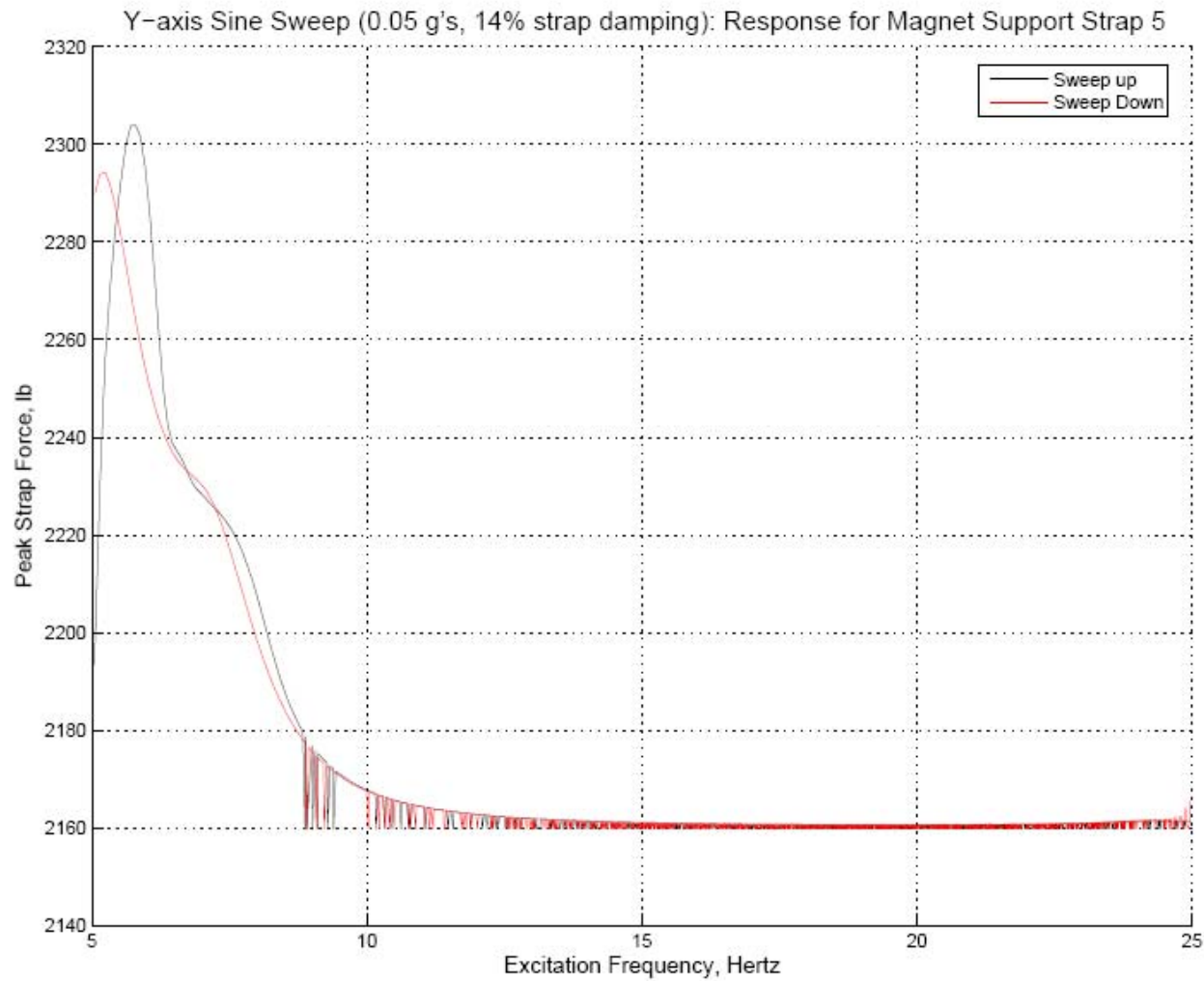
Figure 9-158 Strap 2 frequency response envelope for y-axis 0.05 g excitation



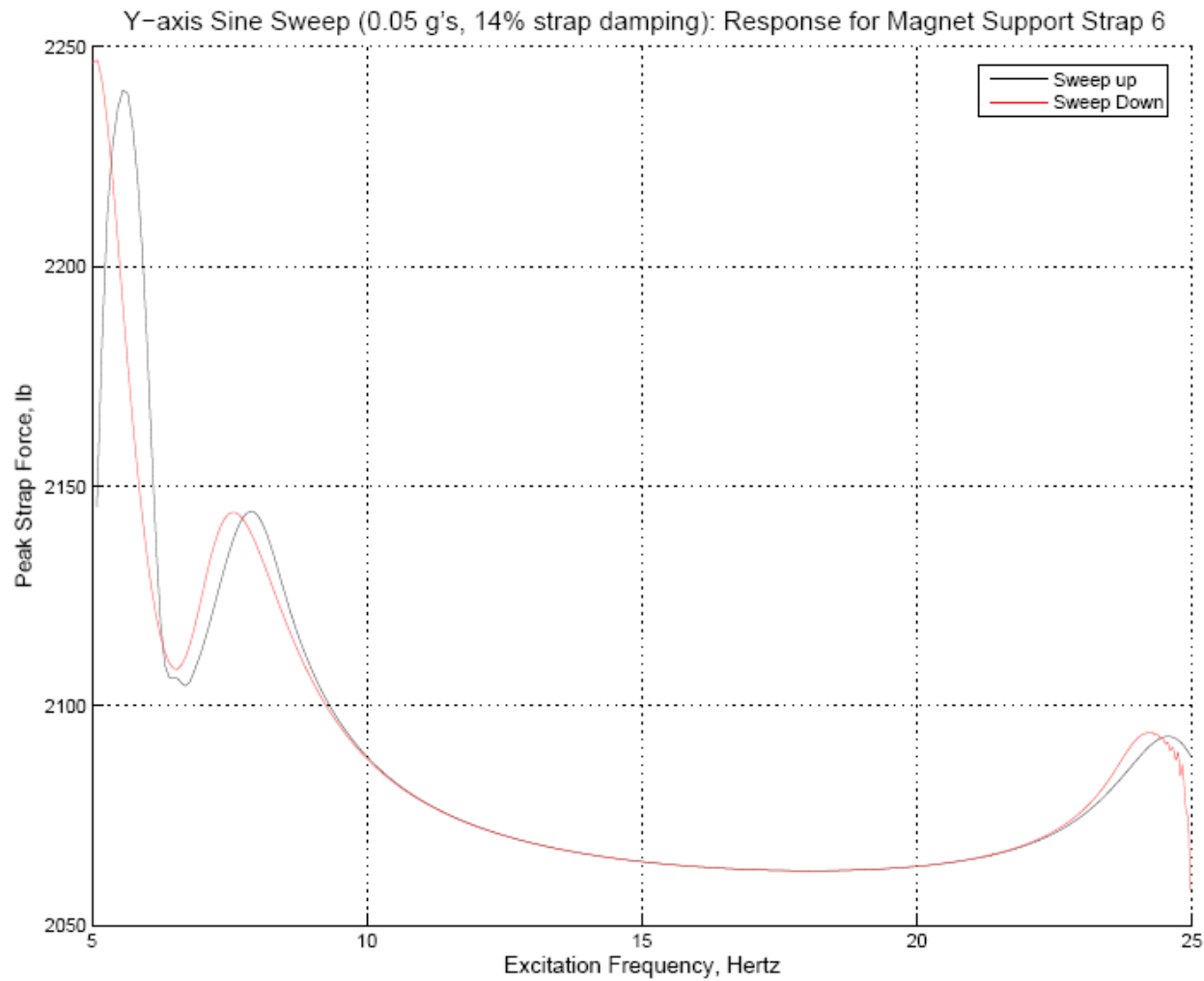
**Figure 9-159** Strap 3 frequency response envelope for y-axis 0.05 g excitation



**Figure 9-160** Strap 4 frequency response envelope for y-axis 0.05 g excitation



**Figure 9-161** Strap 5 frequency response envelope for y-axis 0.05 g excitation



**Figure 9-162** Strap 6 frequency response envelope for y-axis 0.05 g excitation

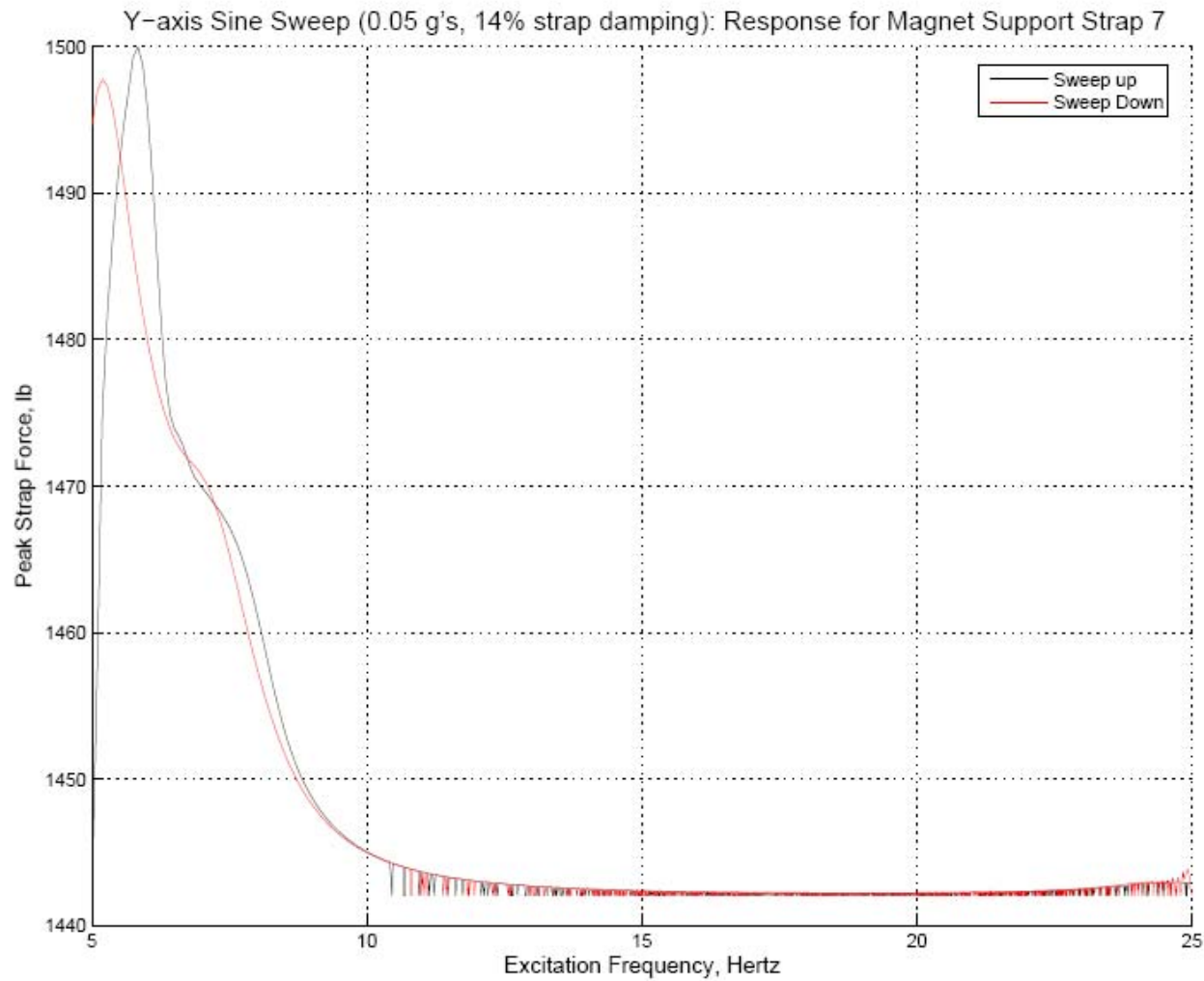
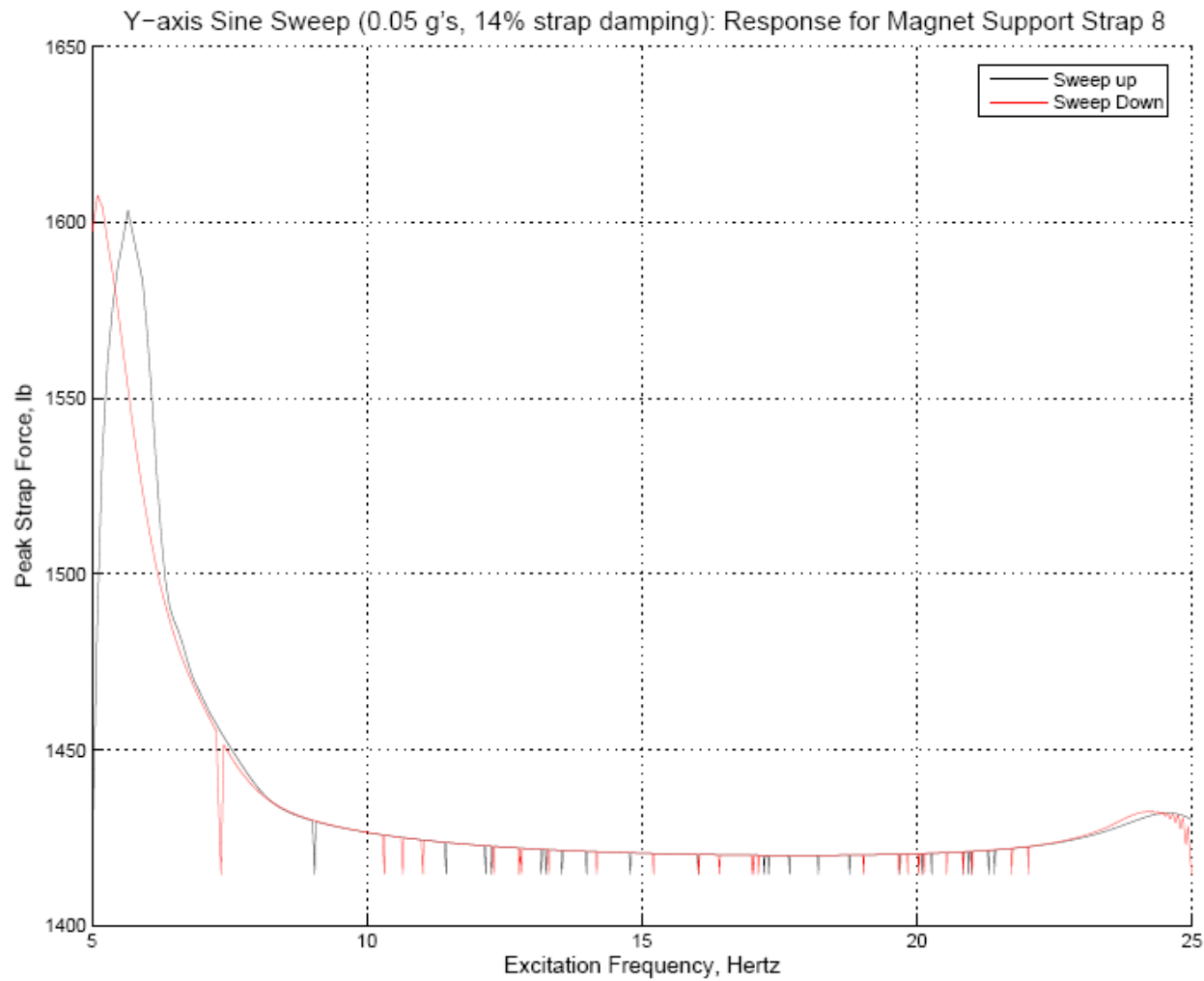


Figure 9-163 Strap 7 frequency response envelope for y-axis 0.05 g excitation



**Figure 9-164** Strap 8 frequency response envelope for y-axis 0.05 g excitation

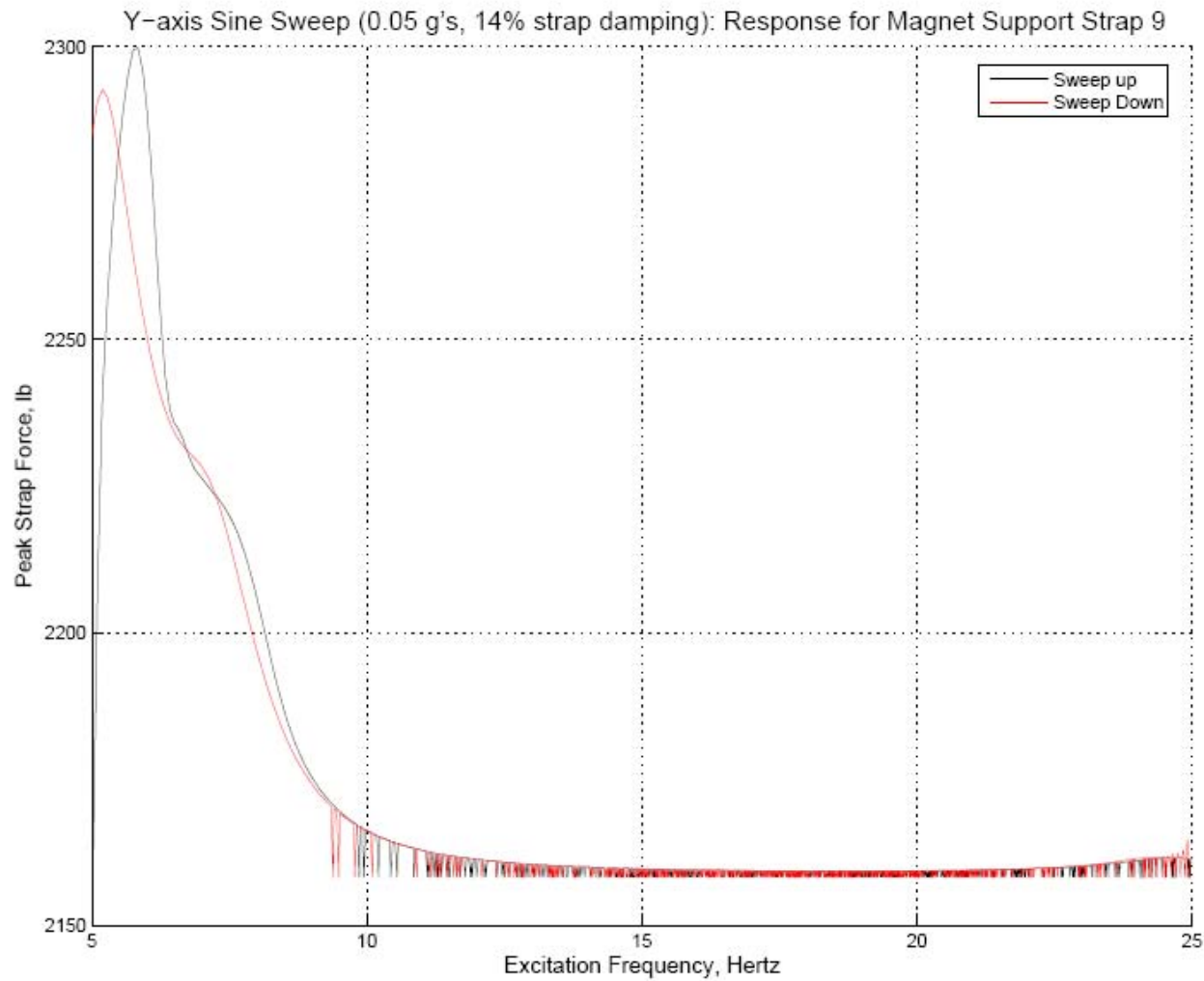


Figure 9-165 Strap 9 frequency response envelope for y-axis 0.05 g excitation



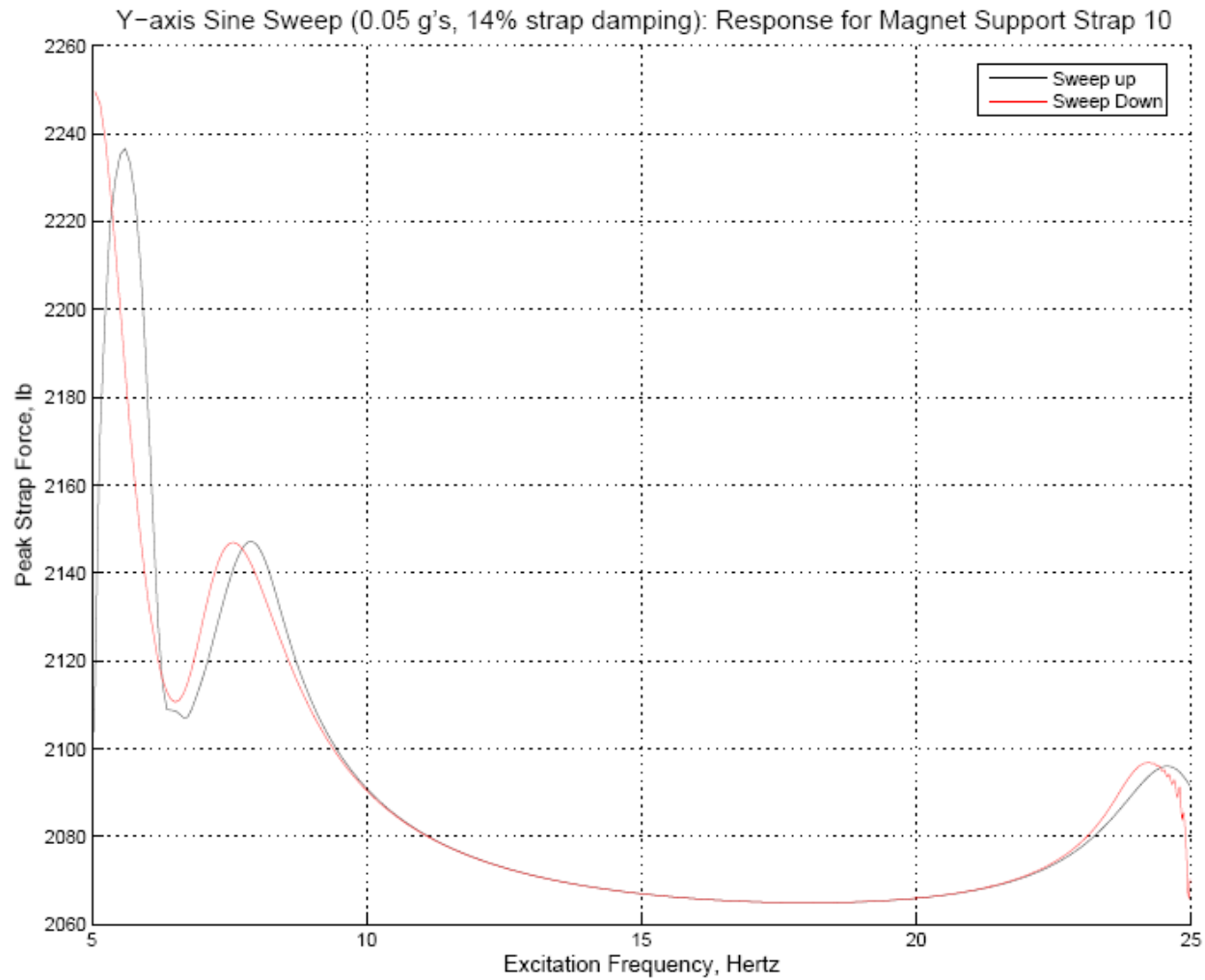


Figure 9-166 Strap 10 frequency response envelope for y-axis 0.05 g excitation

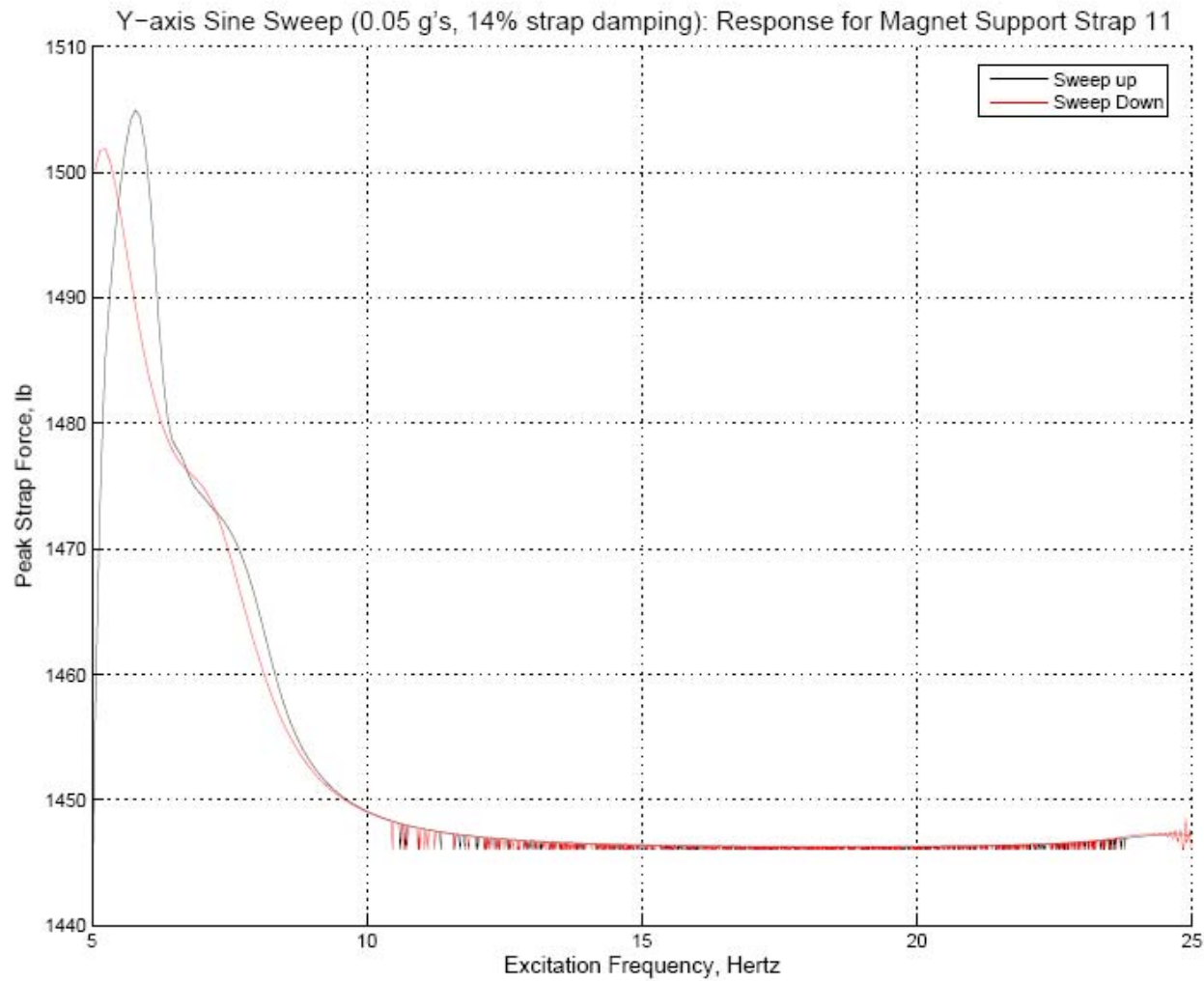


Figure 9-167 Strap 11 frequency response envelope for y-axis 0.05 g excitation

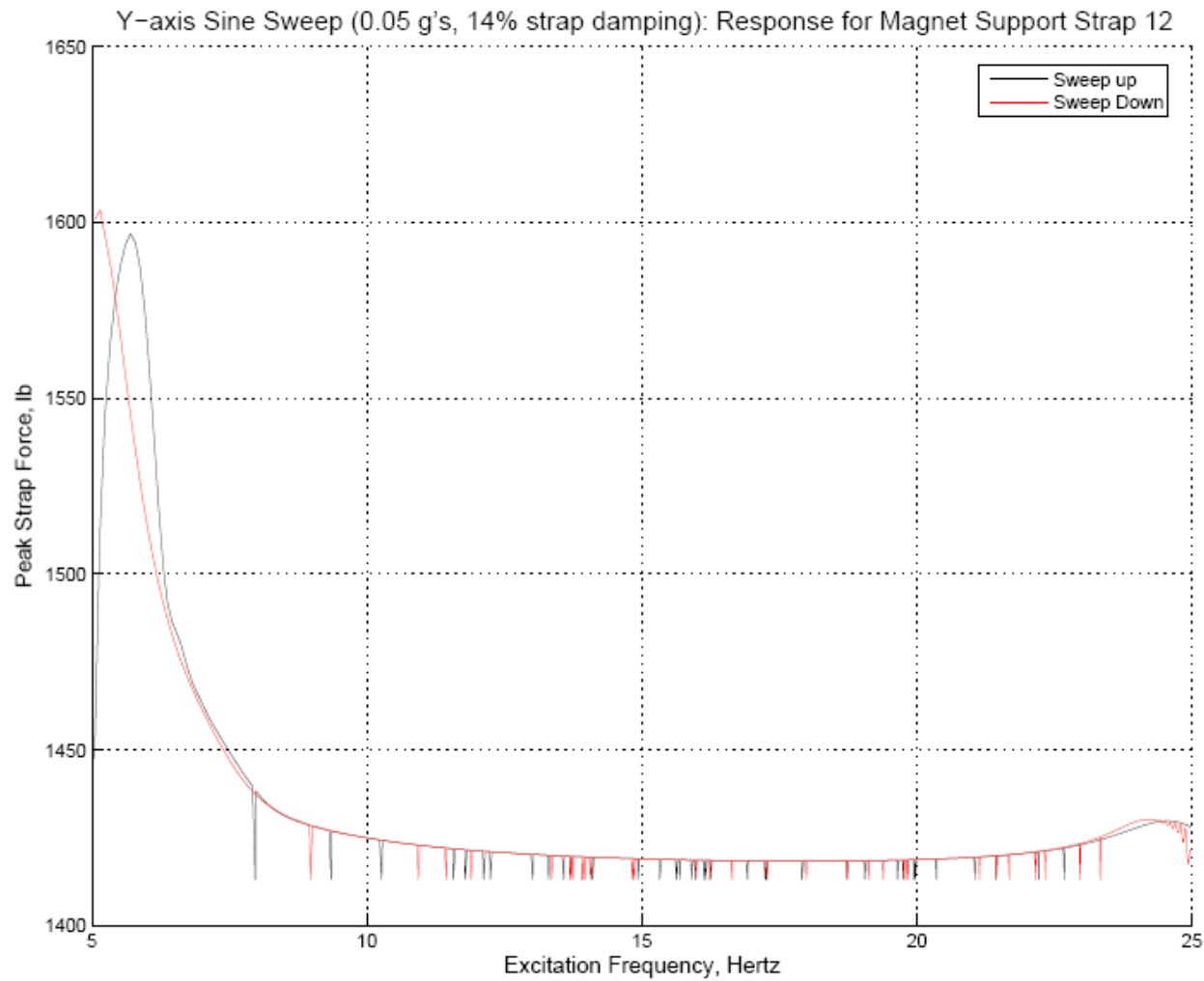


Figure 9-168 Strap 12 frequency response envelope for y-axis 0.05 g excitation

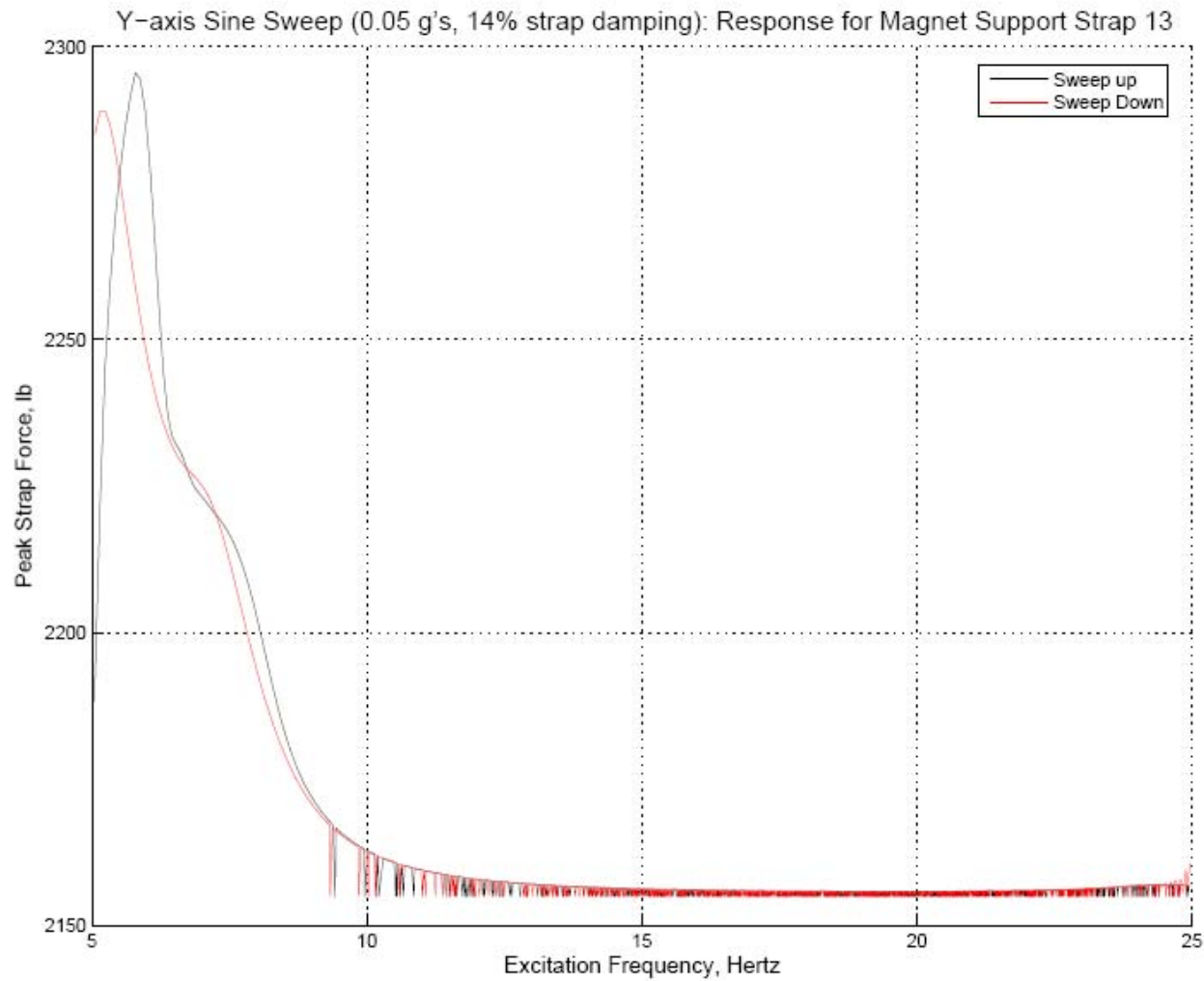


Figure 9-169 Strap 13 frequency response envelope for y-axis 0.05 g excitation

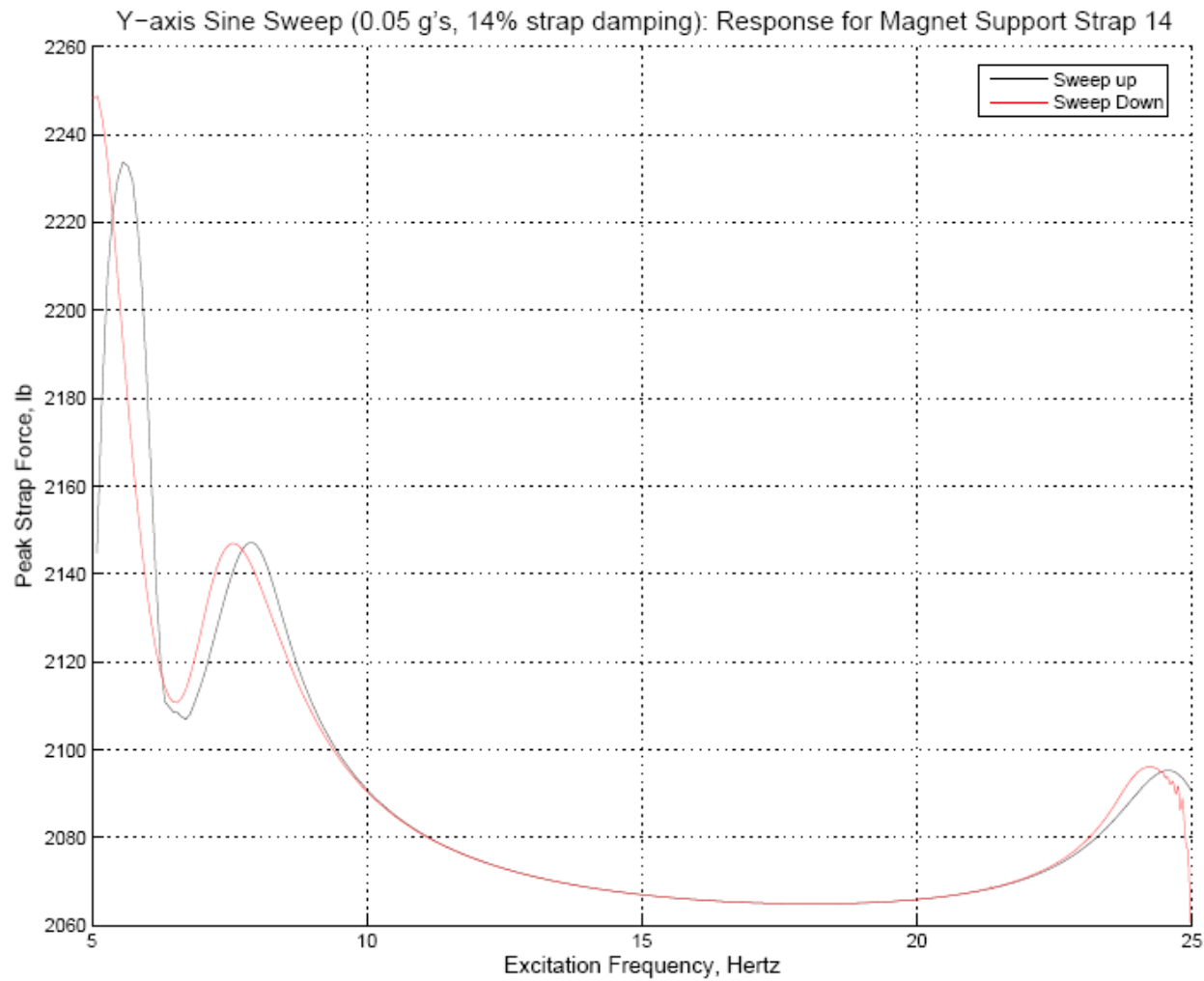


Figure 9-170 Strap 14 frequency response envelope for y-axis 0.05 g excitation

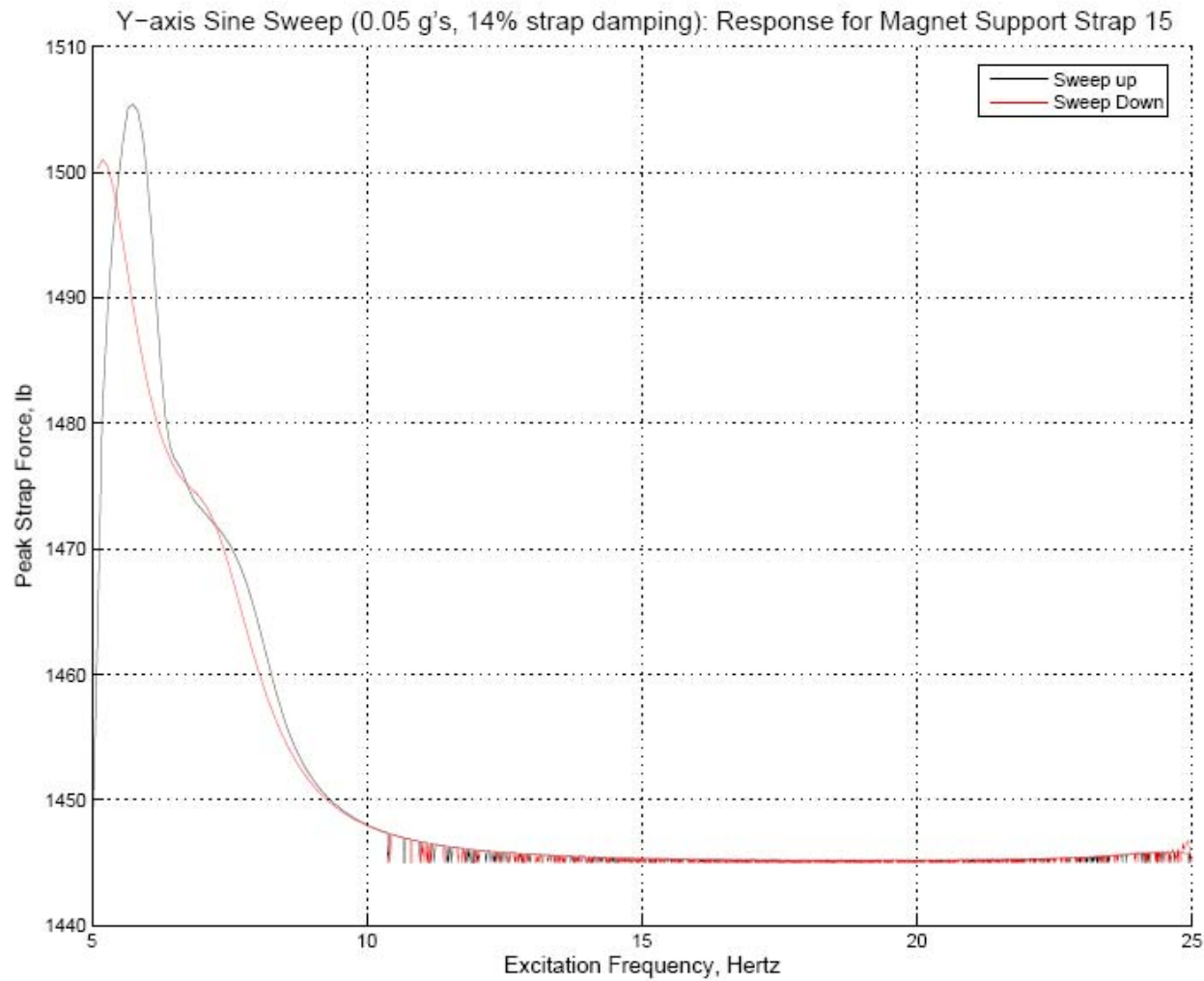


Figure 9-171 Strap 15 frequency response envelope for y-axis 0.05 g excitation

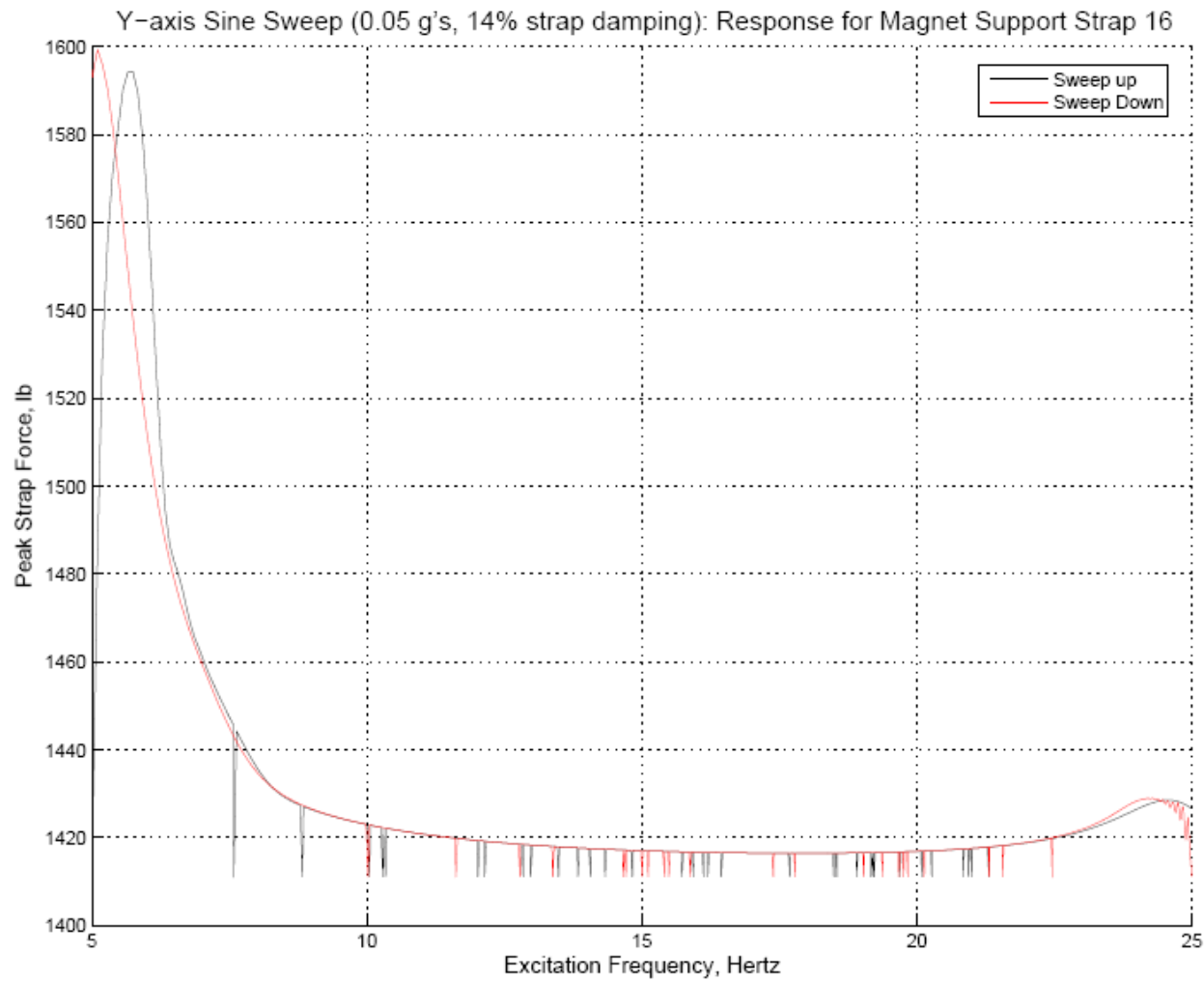
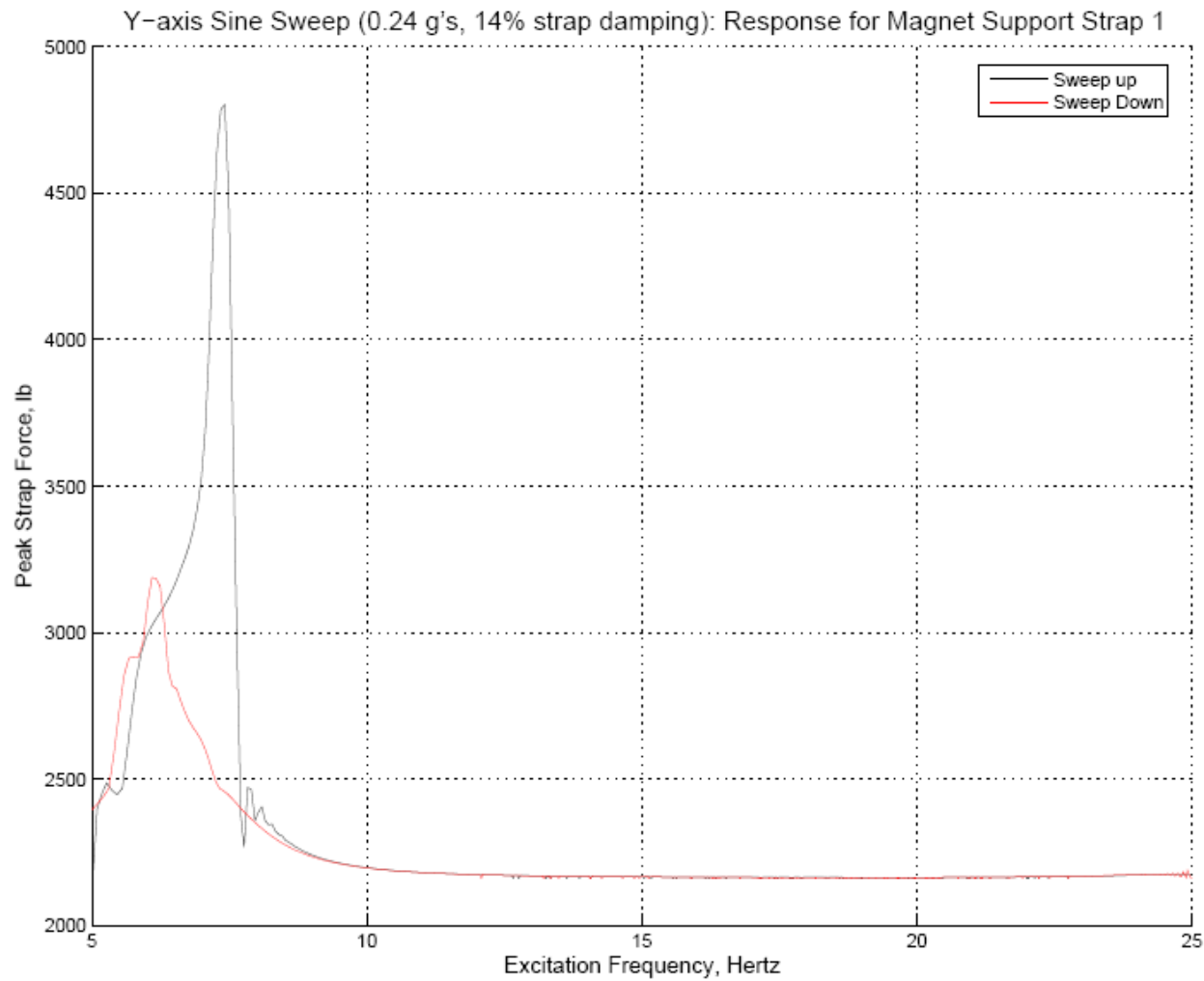


Figure 9-172 Strap 16 frequency response envelope for y-axis 0.05 g excitation



**Figure 9-173** Strap 1 frequency response envelope for y-axis 0.24 g excitation



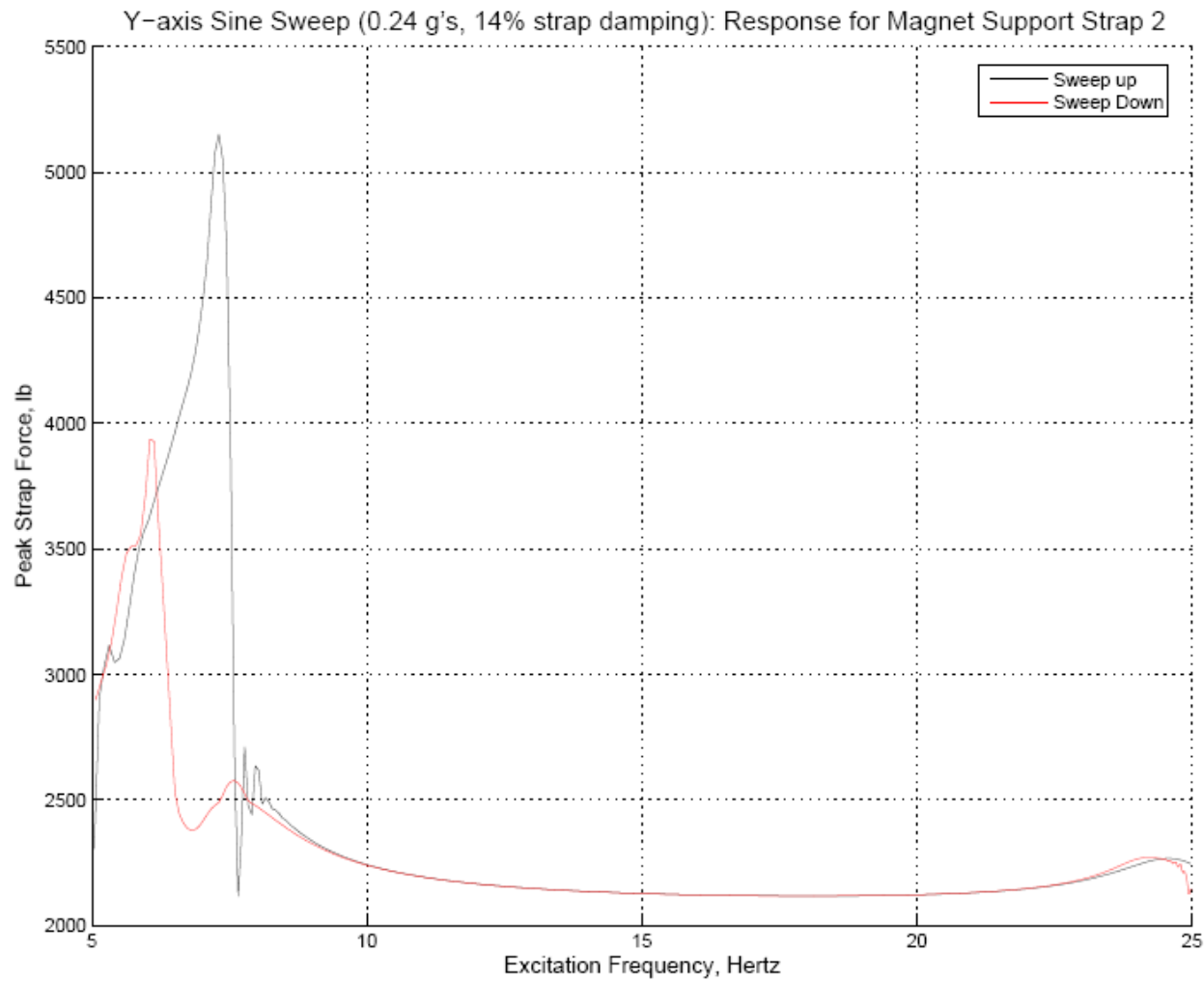


Figure 9-174 Strap 2 frequency response envelope for y-axis 0.24 g excitation

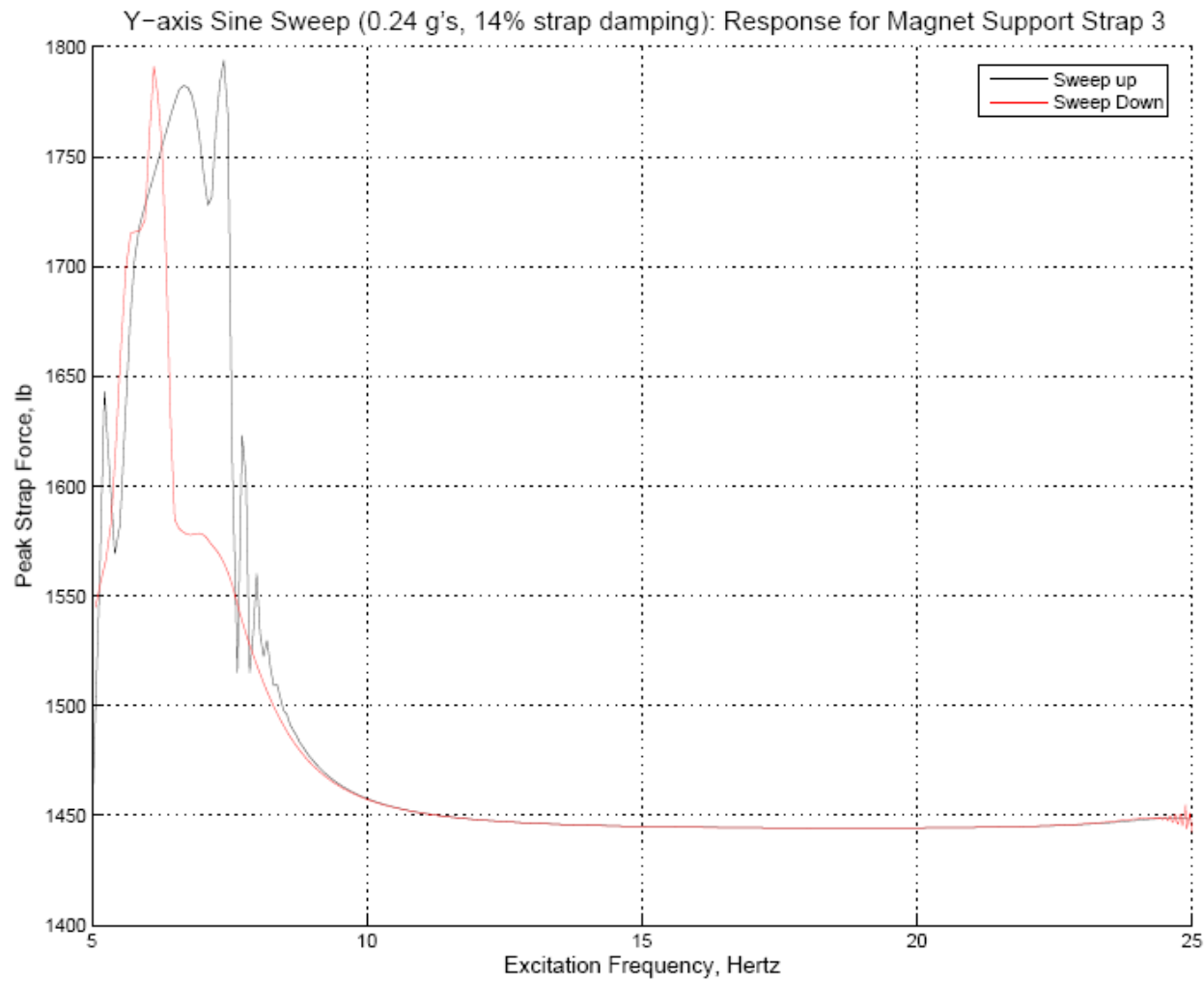


Figure 9-175 Strap 3 frequency response envelope for y-axis 0.24 g excitation

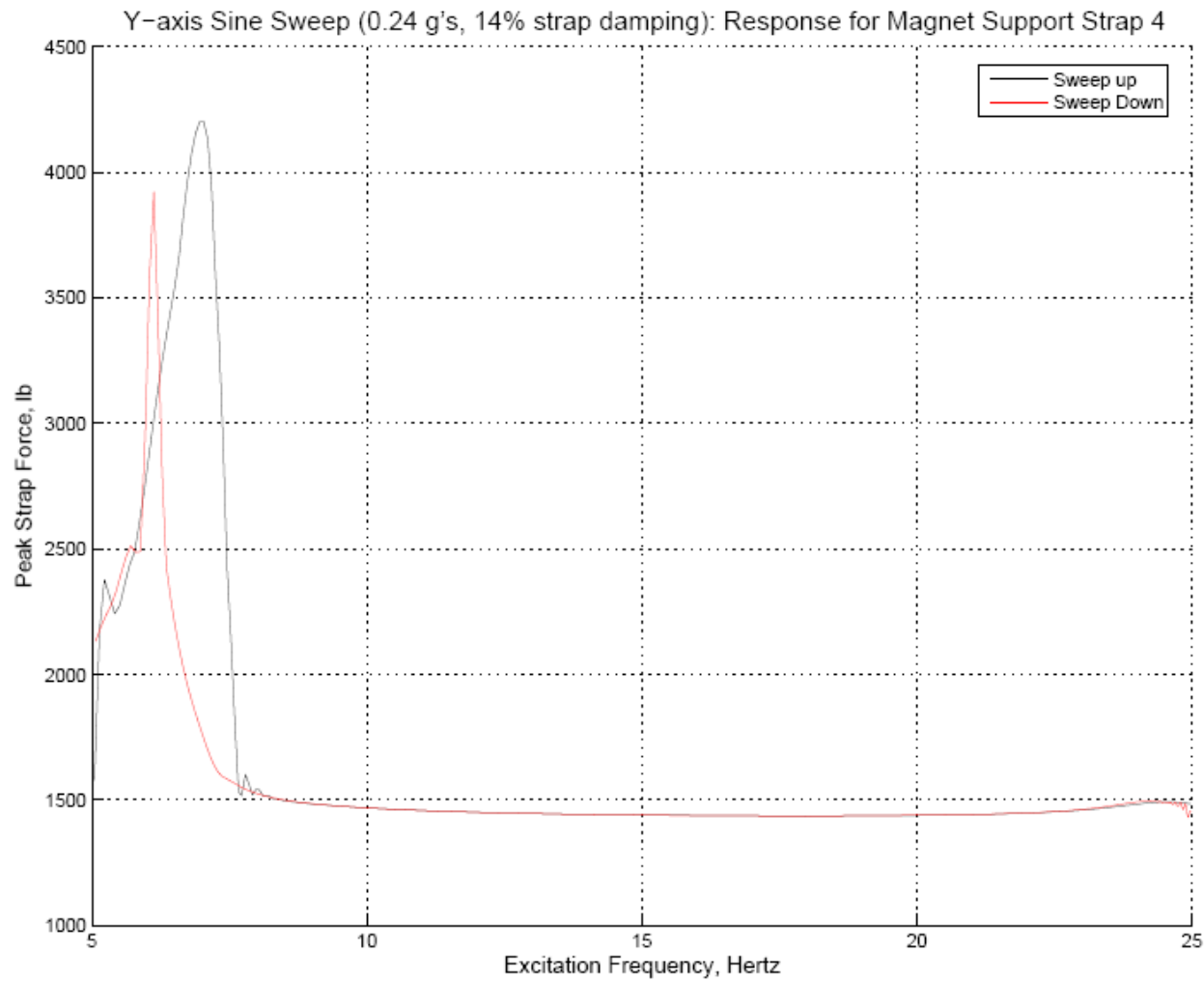


Figure 9-176 Strap 4 frequency response envelope for y-axis 0.24 g excitation

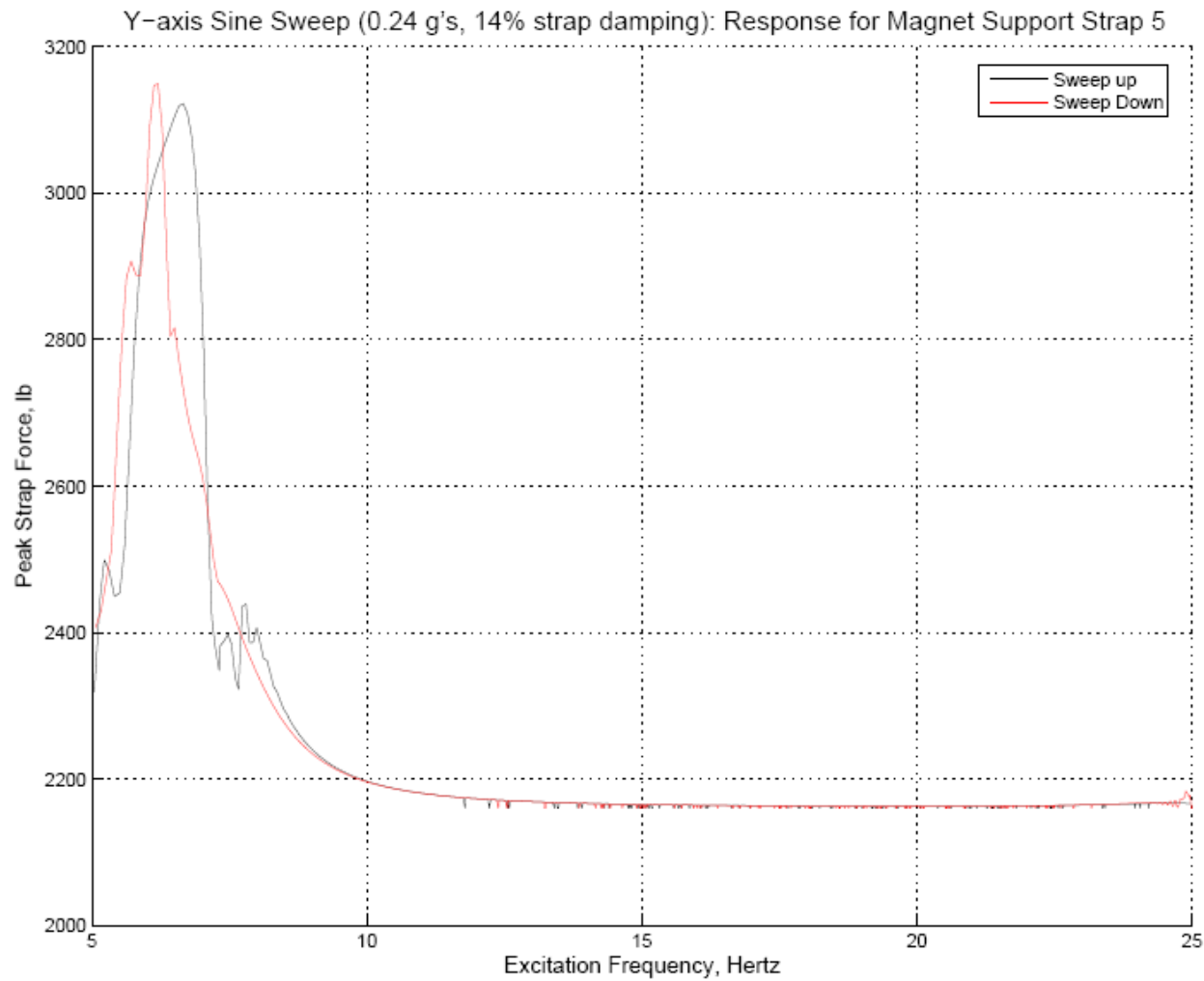


Figure 9-177 Strap 5 frequency response envelope for y-axis 0.24 g excitation

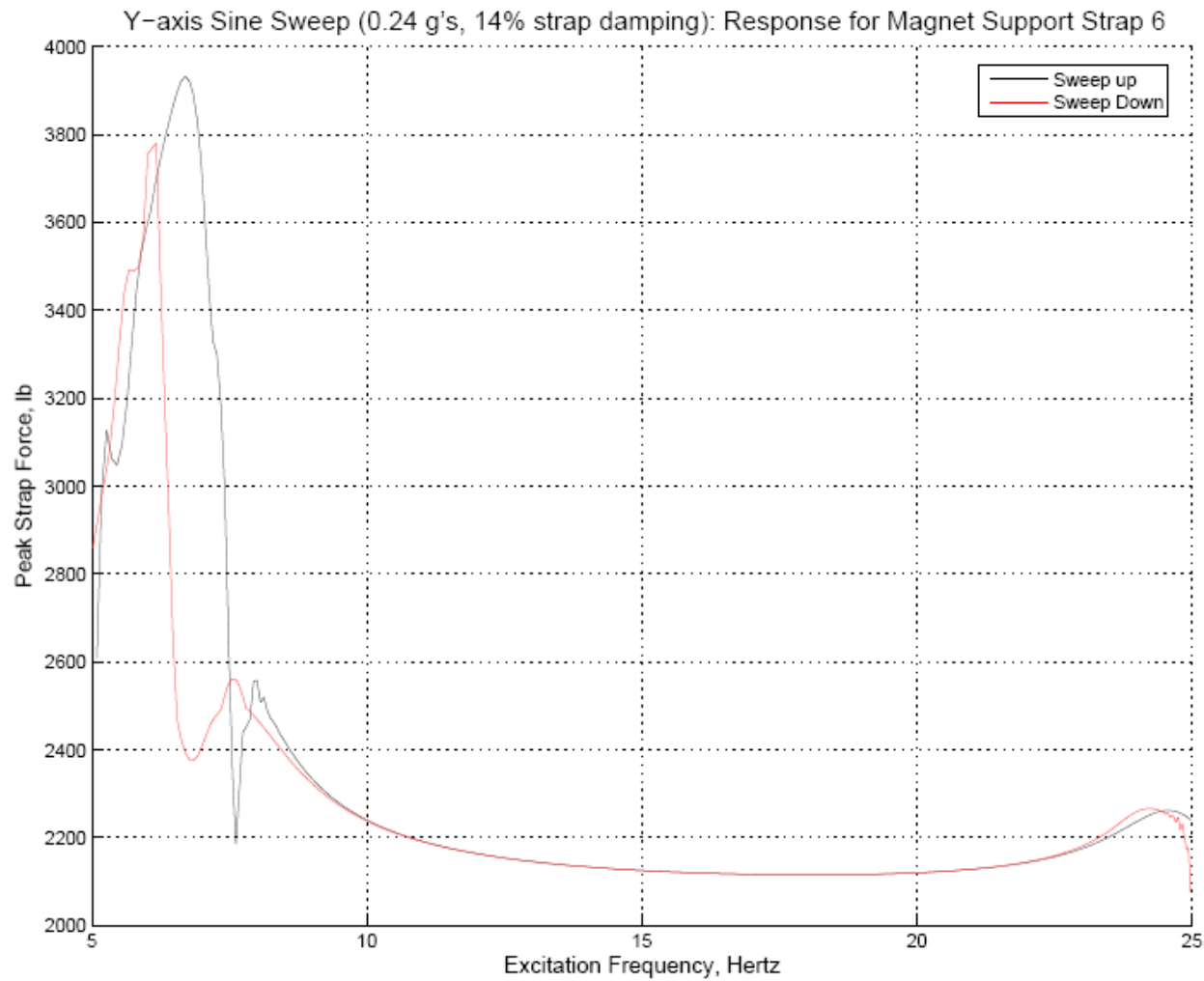


Figure 9-178 Strap 6 frequency response envelope for y-axis 0.24 g excitation

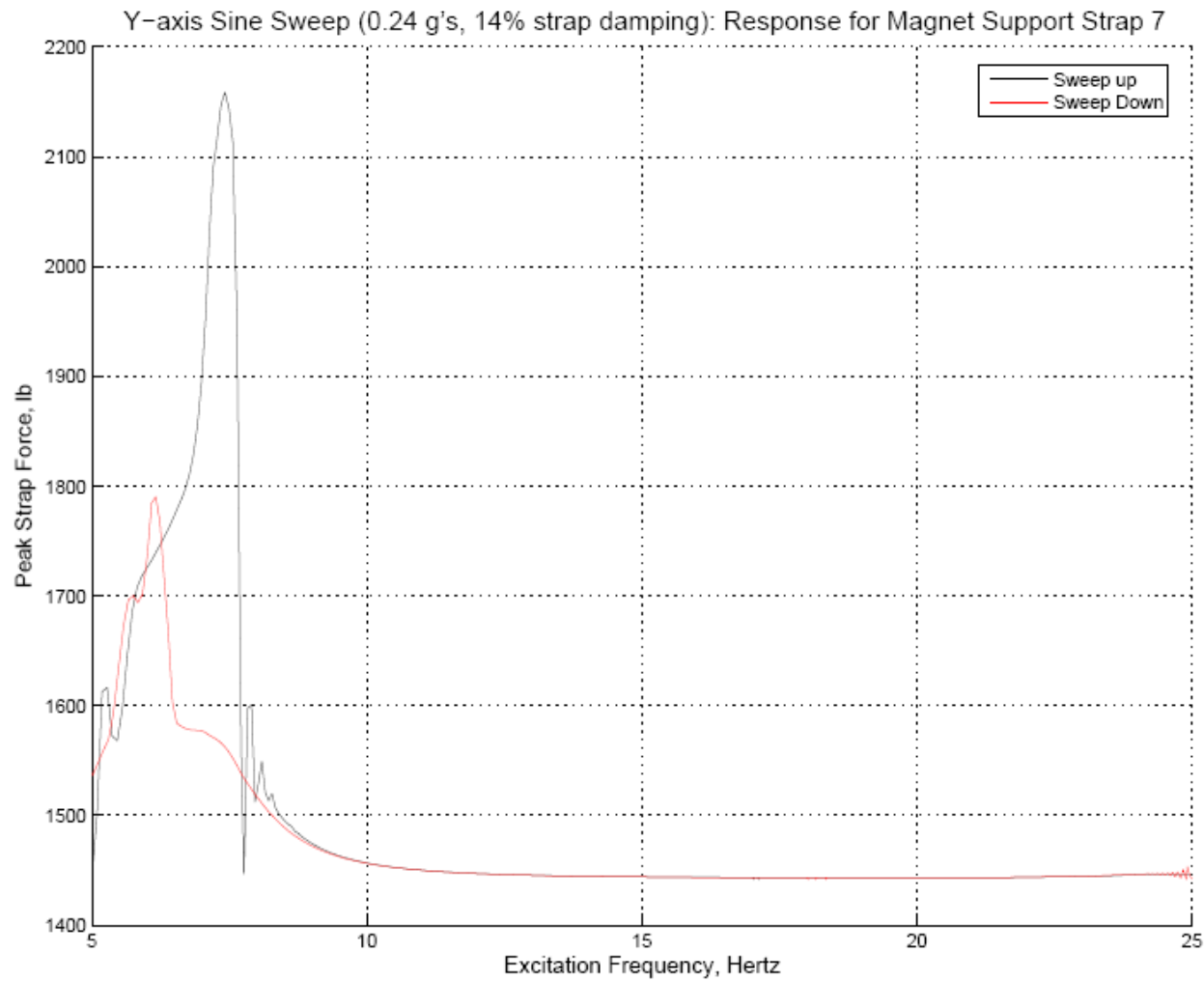
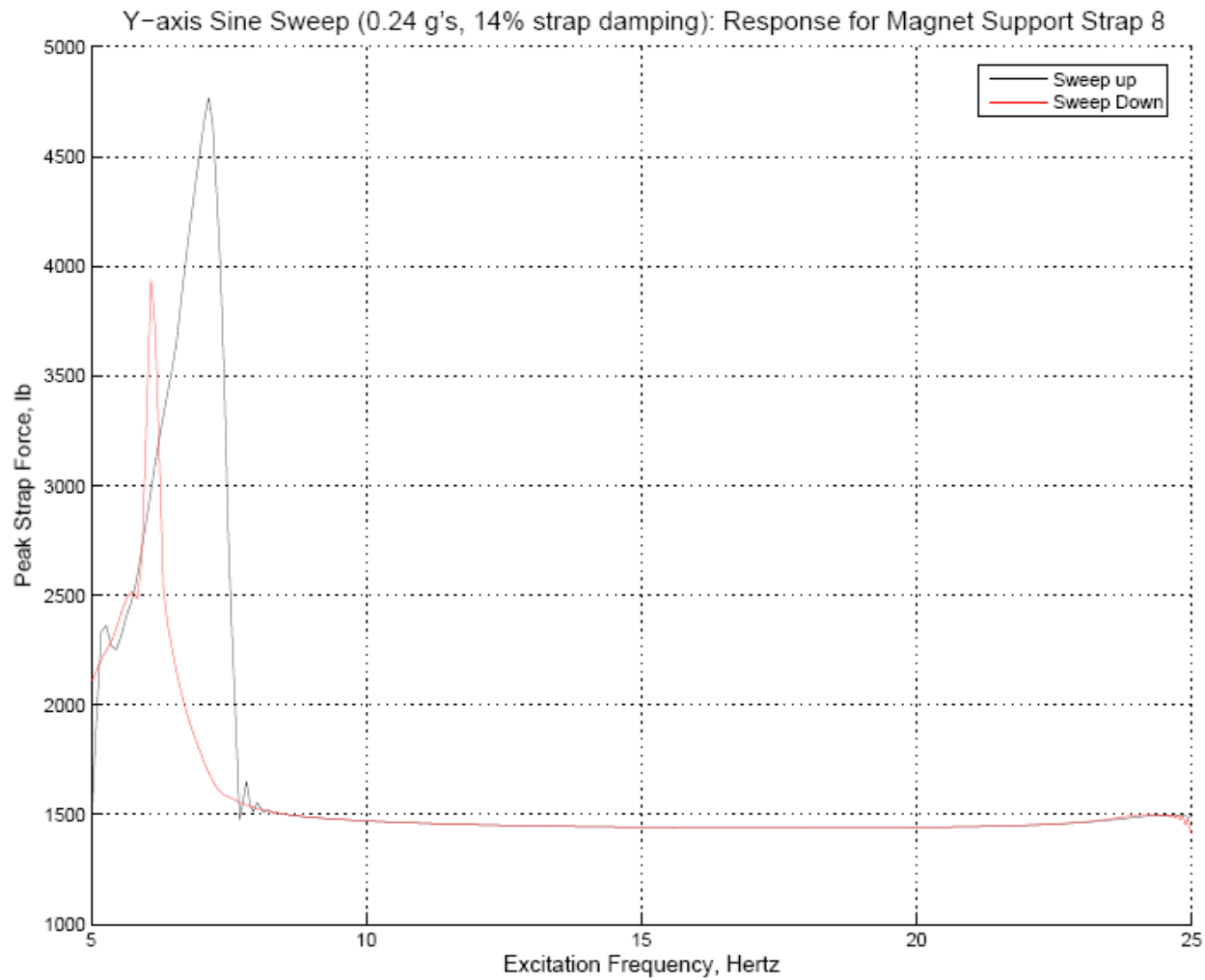


Figure 9-179 Strap 7 frequency response envelope for y-axis 0.24 g excitation



**Figure 9-180** Strap 8 frequency response envelope for y-axis 0.24 g excitation

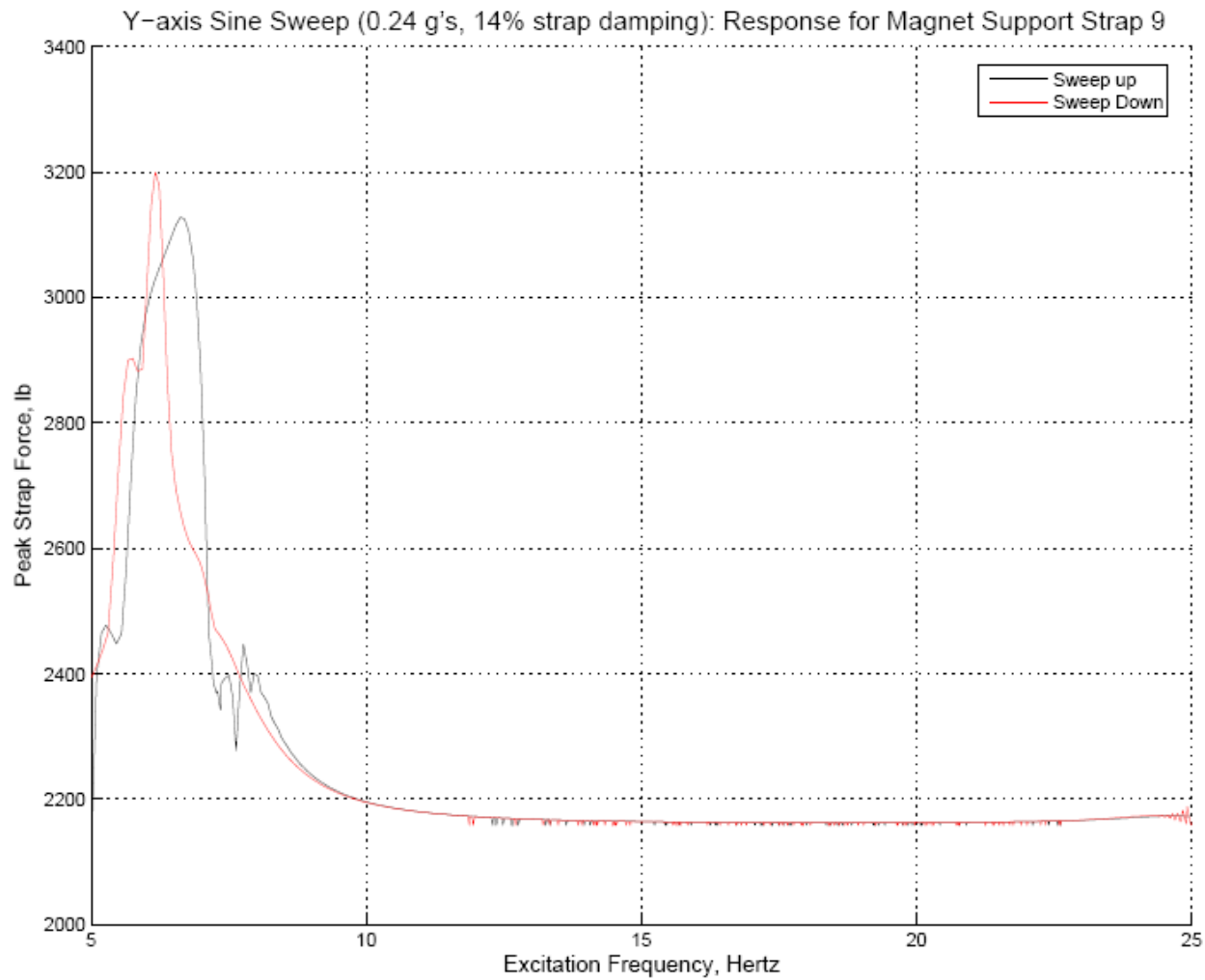


Figure 9-181 Strap 9 frequency response envelope for y-axis 0.24 g excitation



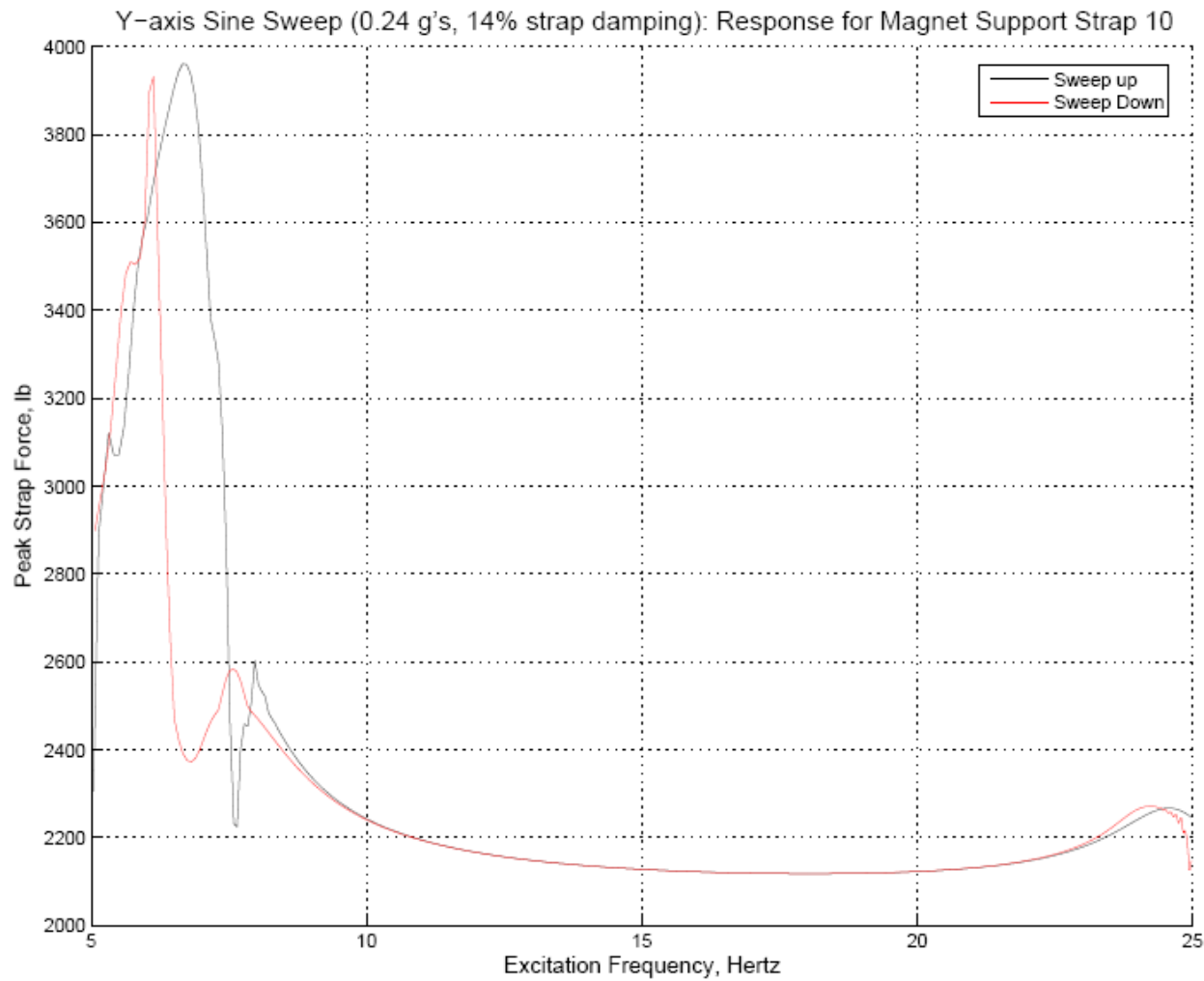
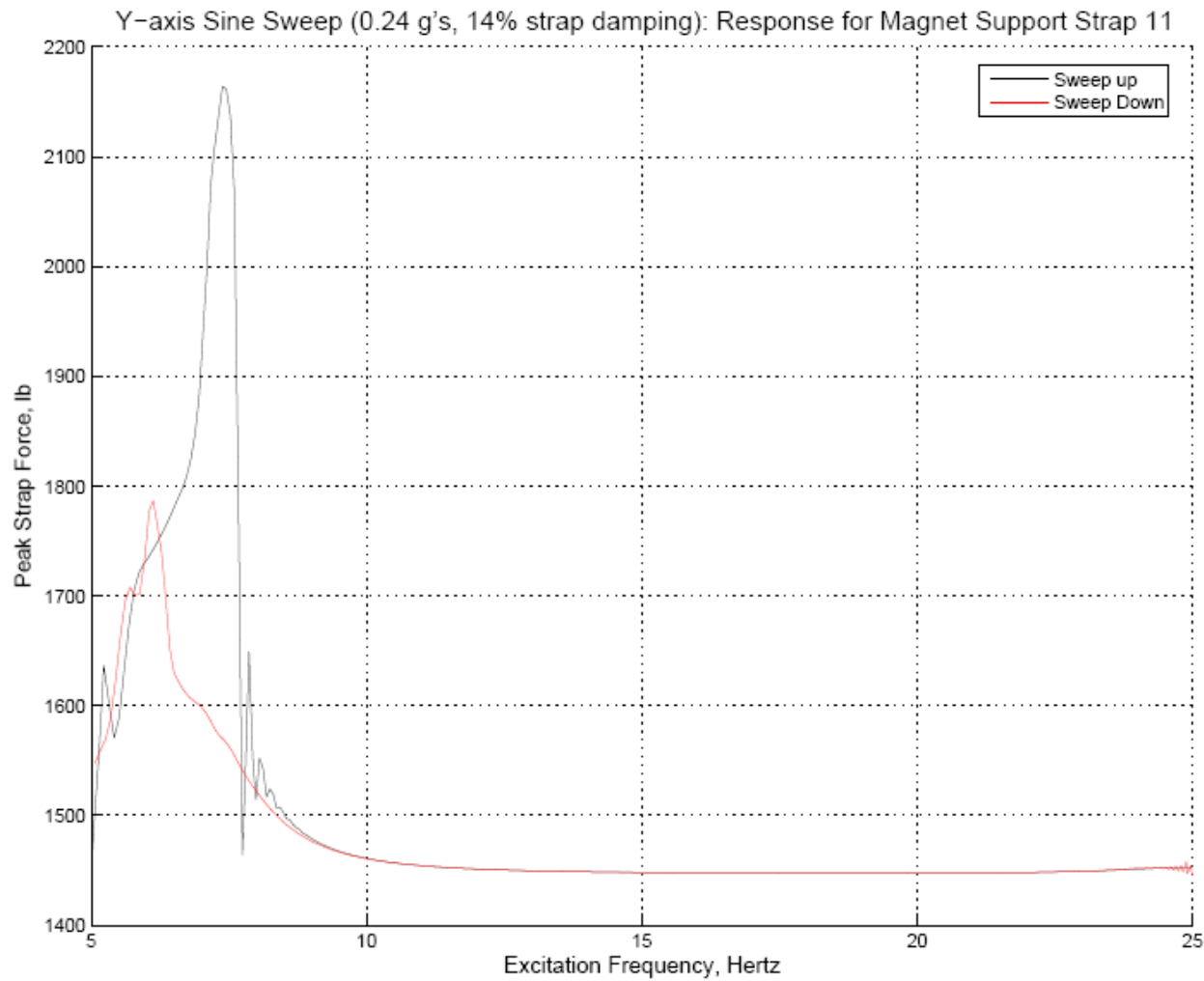


Figure 9-182 Strap 10 frequency response envelope for y-axis 0.24 g excitation



**Figure 9-183 Strap 11 frequency response envelope for y-axis 0.24 g excitation**

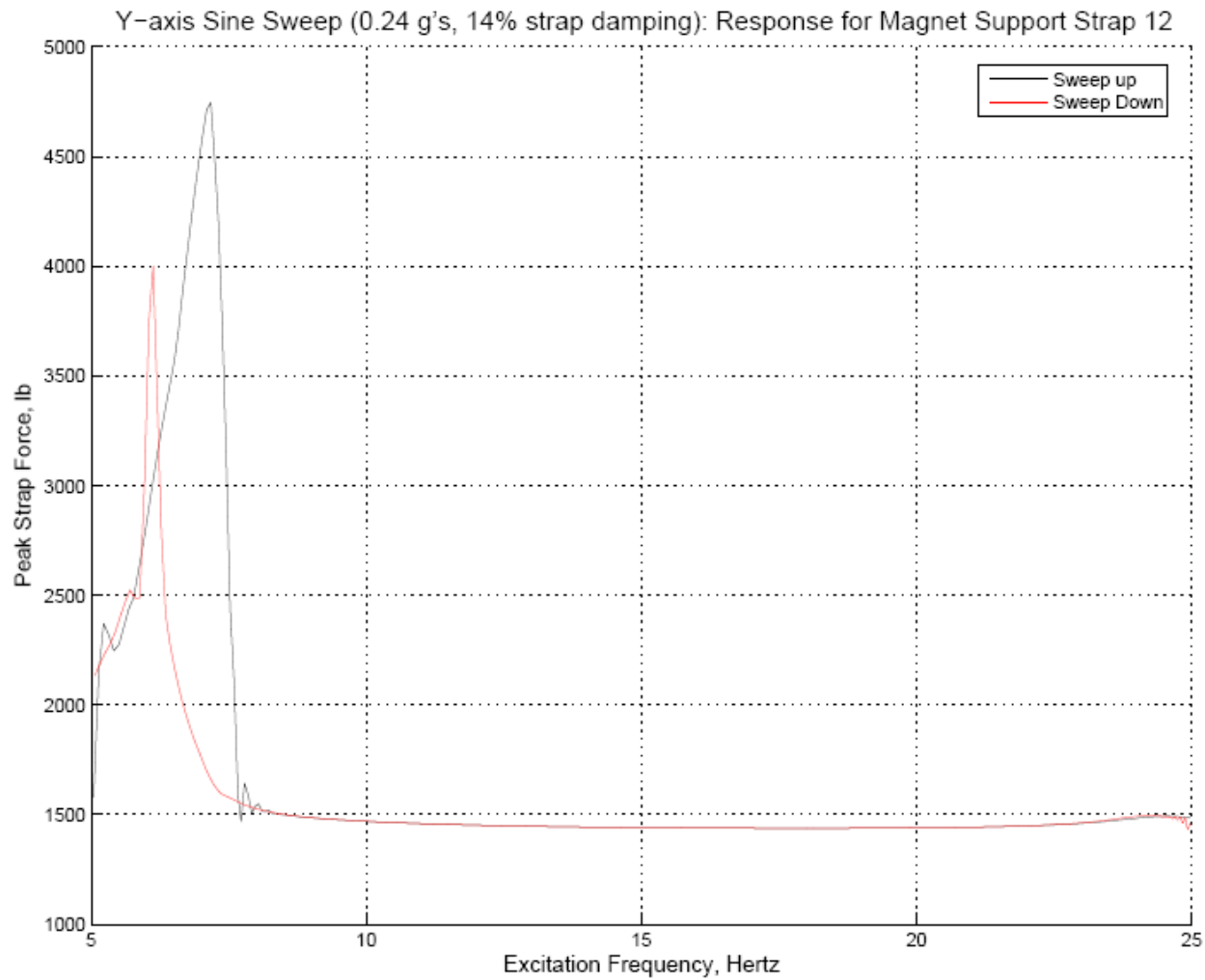


Figure 9-184 Strap 12 frequency response envelope for y-axis 0.24 g excitation

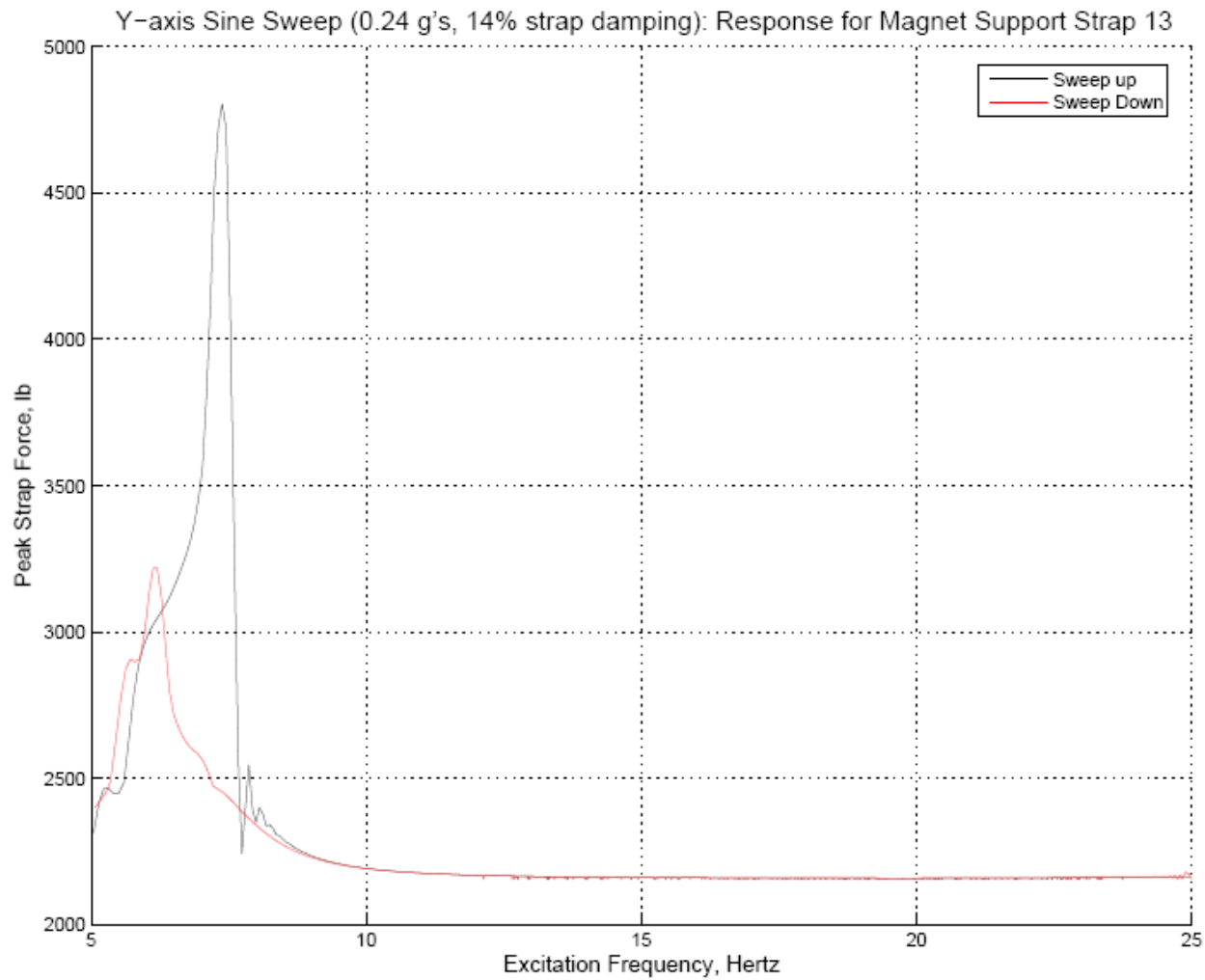


Figure 9-185 Strap 13 frequency response envelope for y-axis 0.24 g excitation

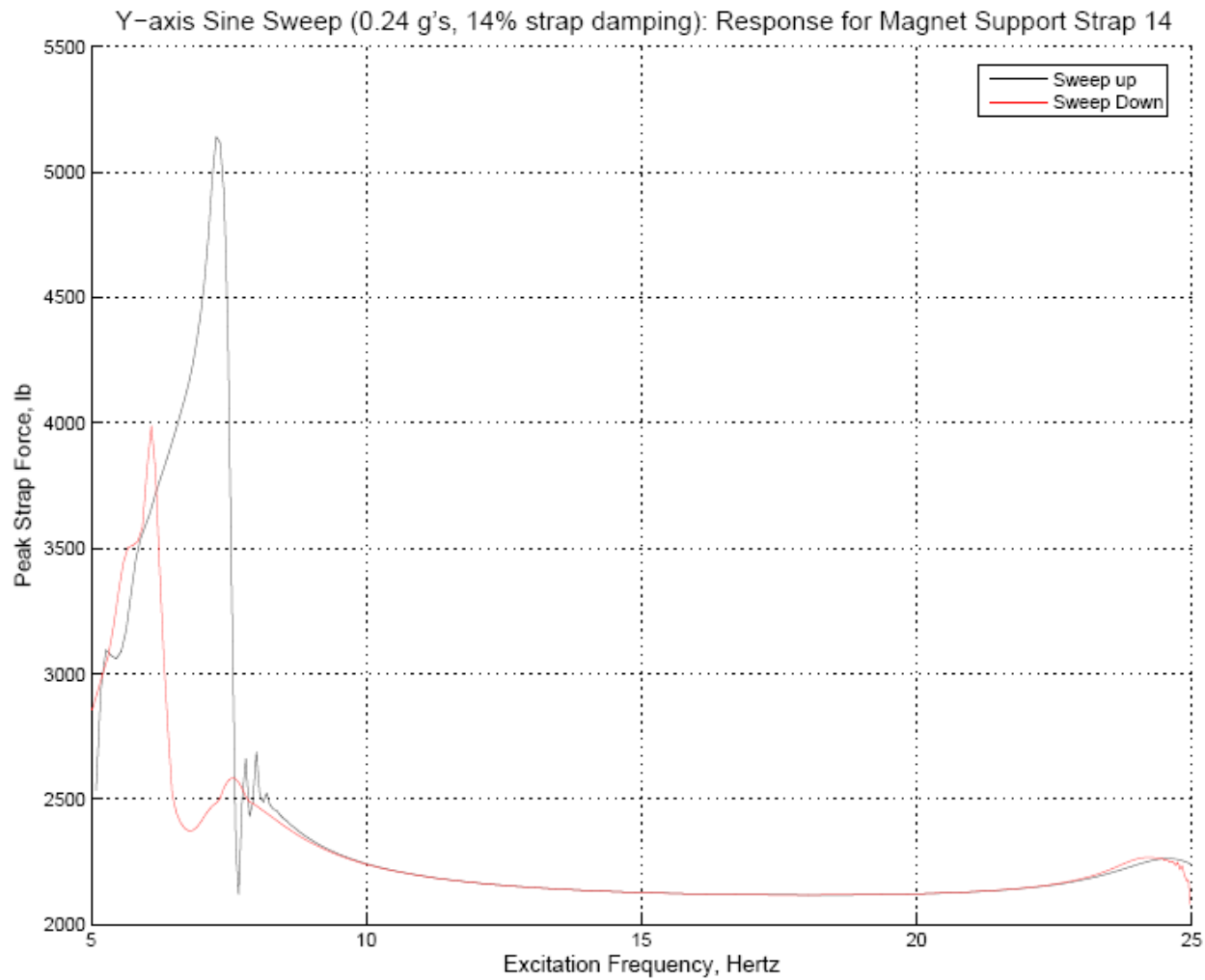


Figure 9-186 Strap 14 frequency response envelope for y-axis 0.24 g excitation

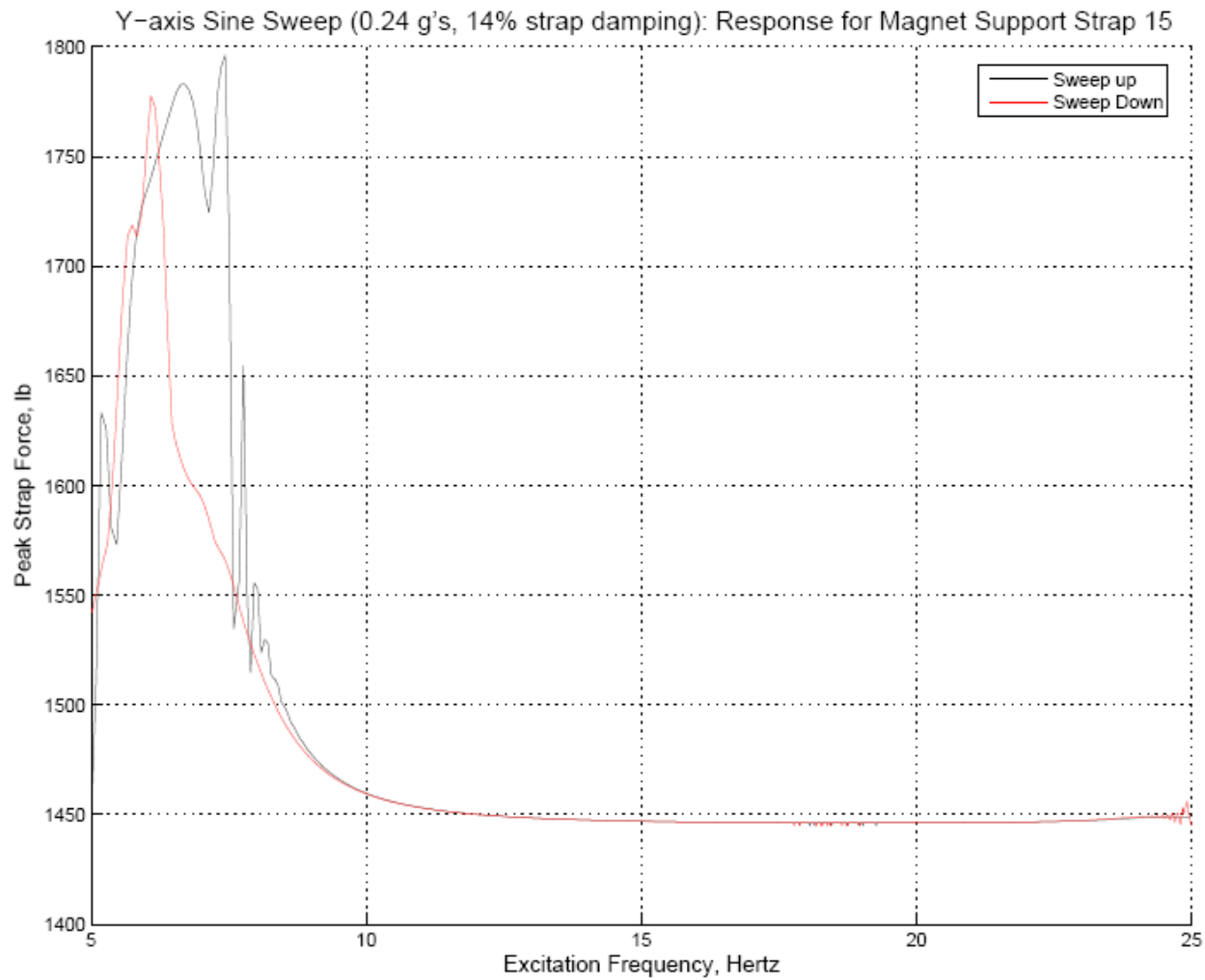


Figure 9-187 Strap 15 frequency response envelope for y-axis 0.24 g excitation

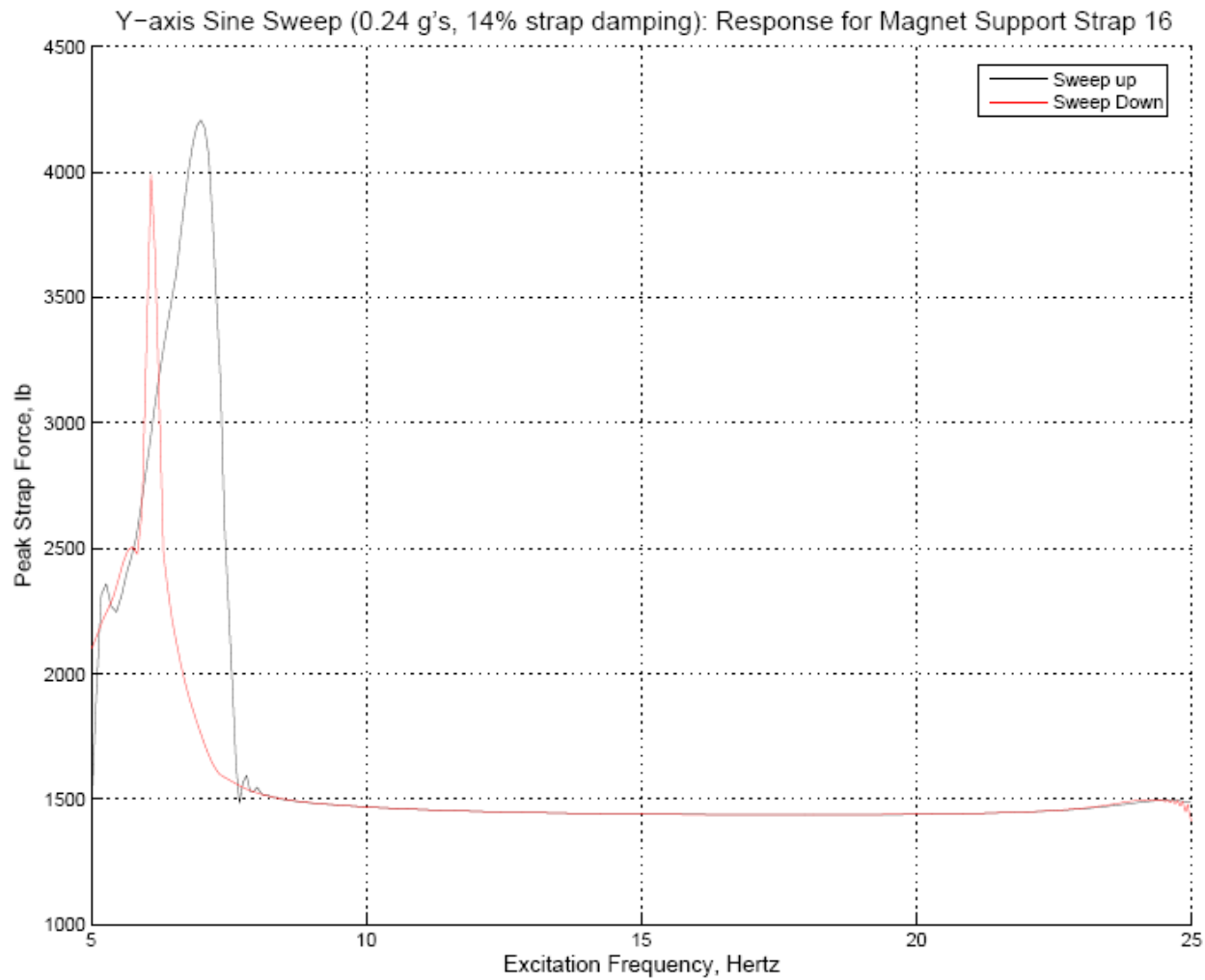
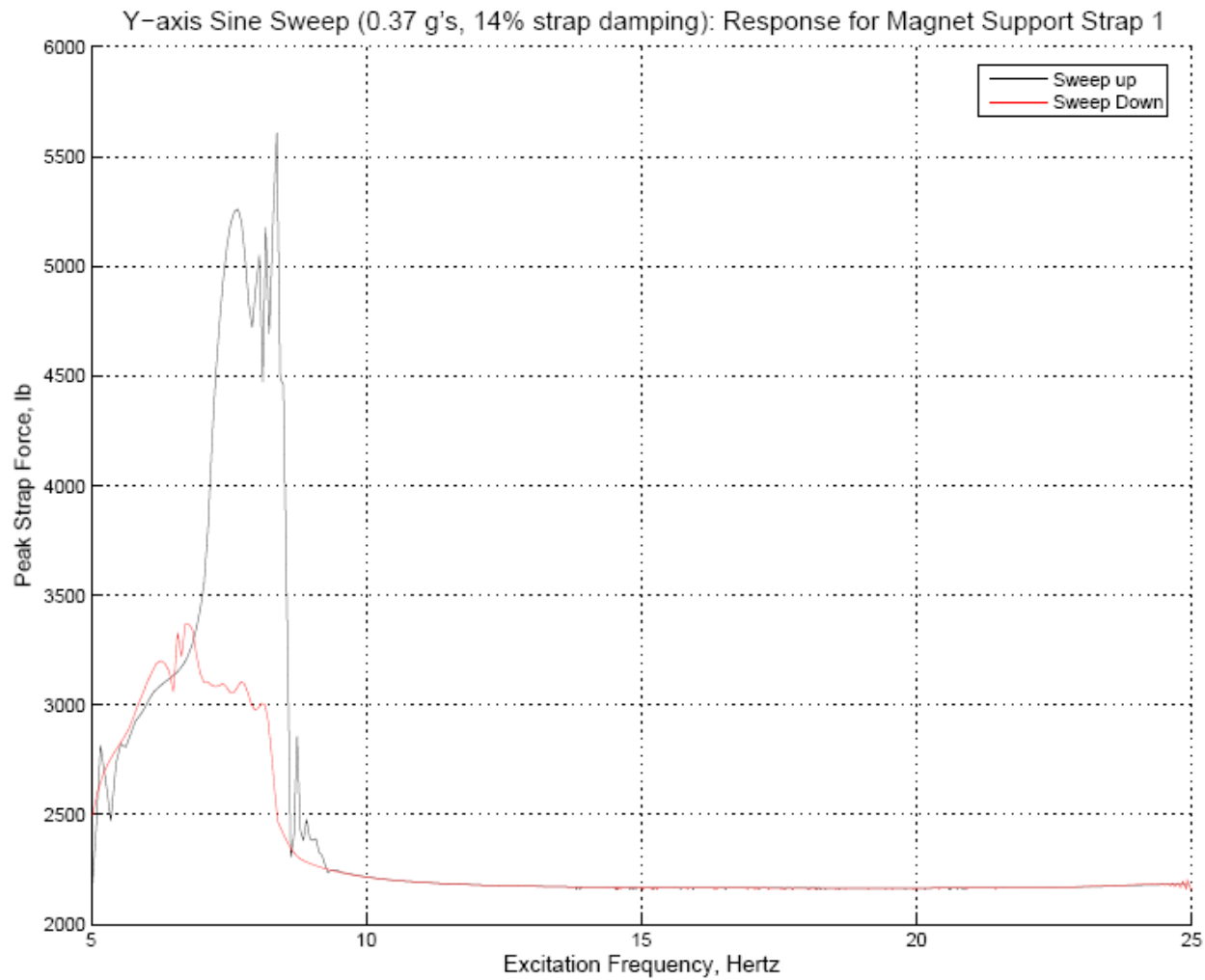
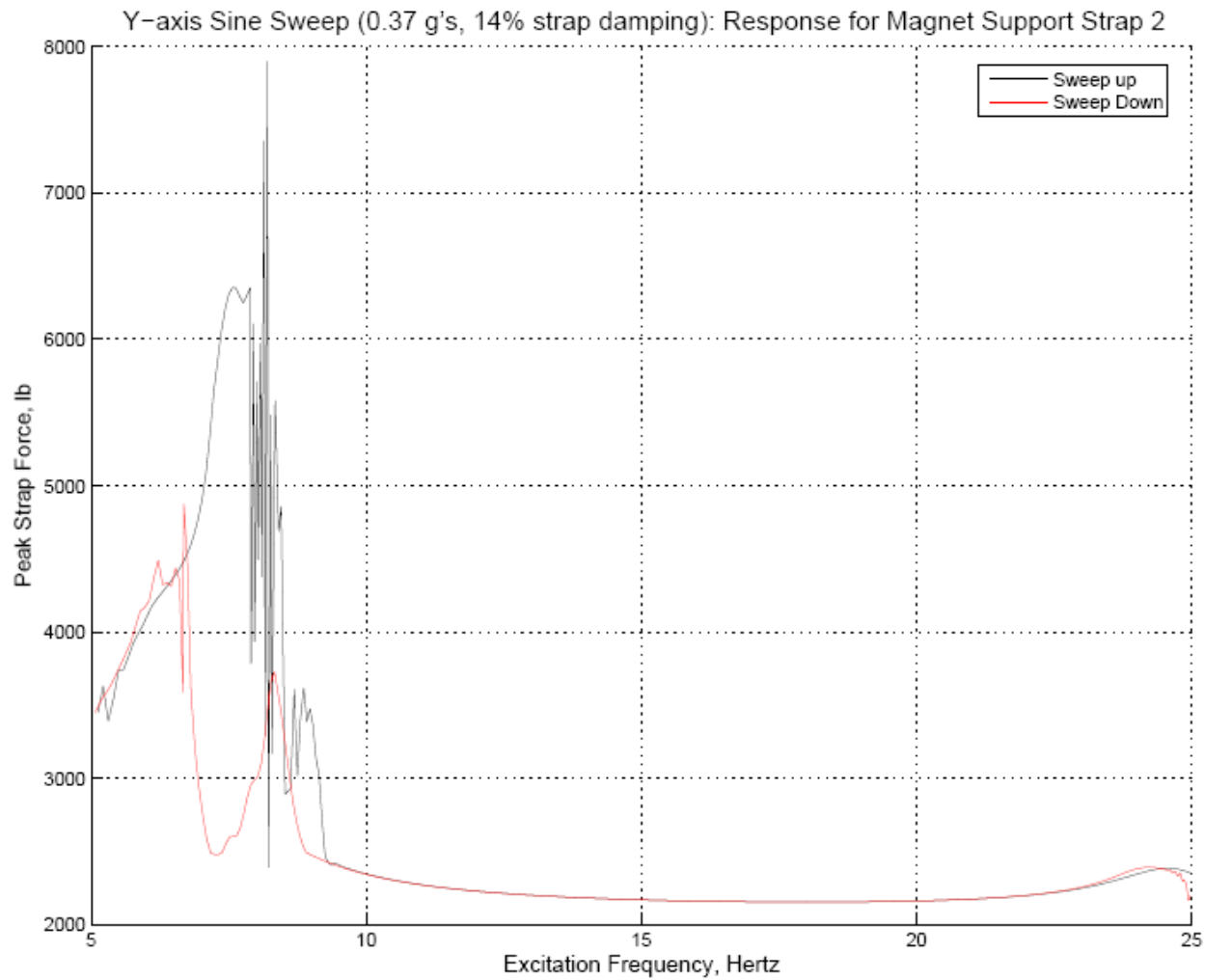


Figure 9-188 Strap 16 frequency response envelope for y-axis 0.24 g excitation

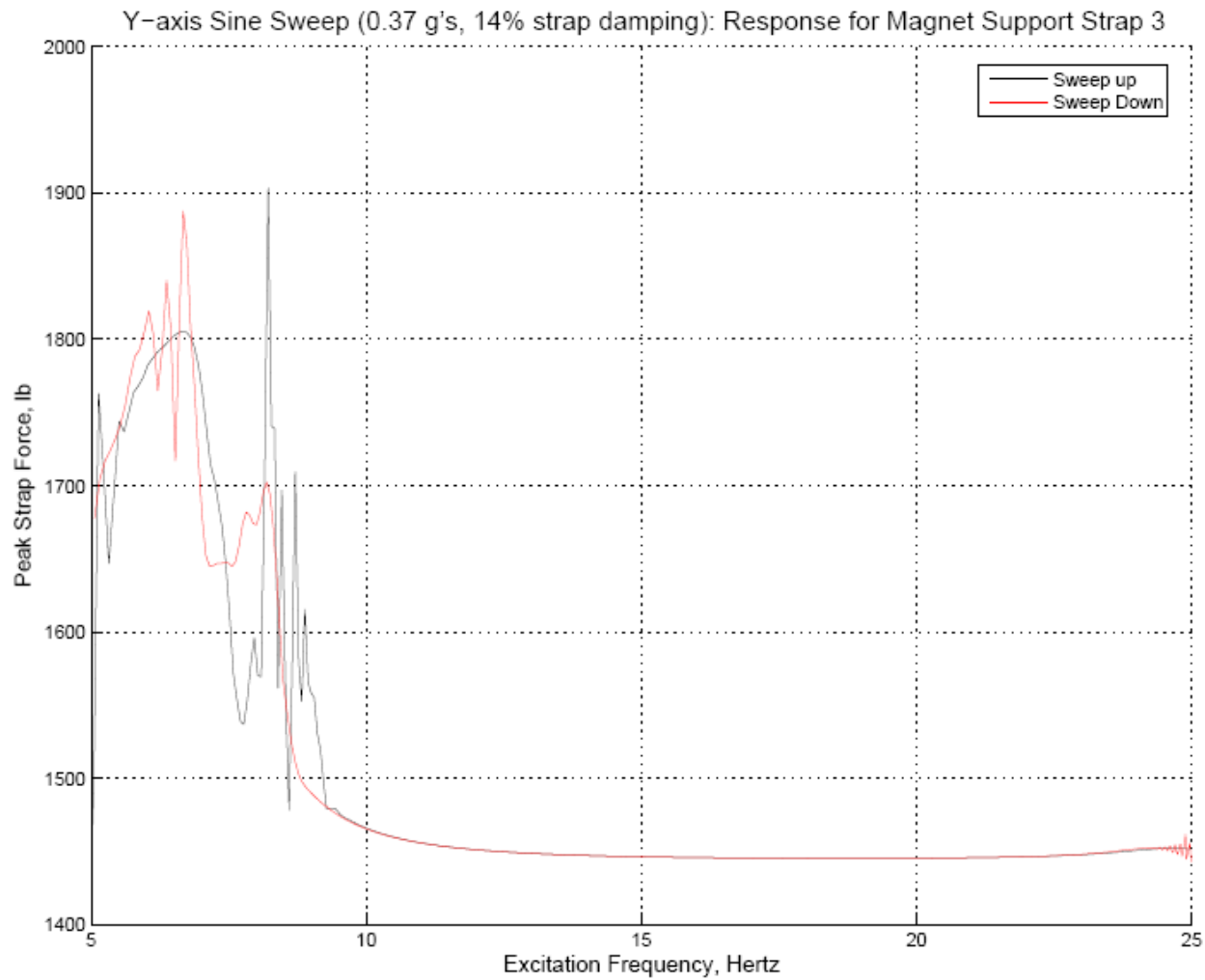


**Figure 9-189** Strap 1 frequency response envelope for y-axis 0.37 g excitation

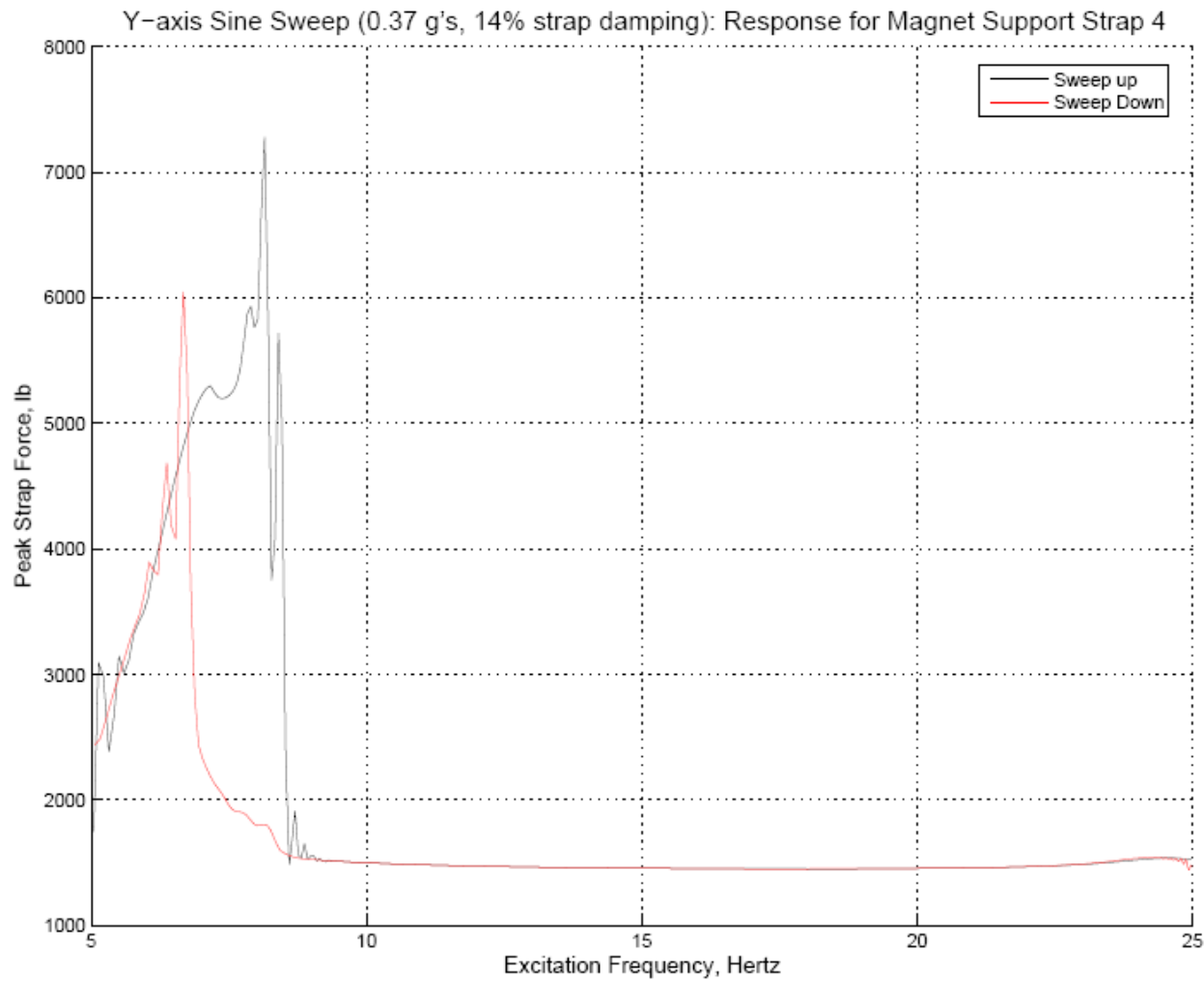




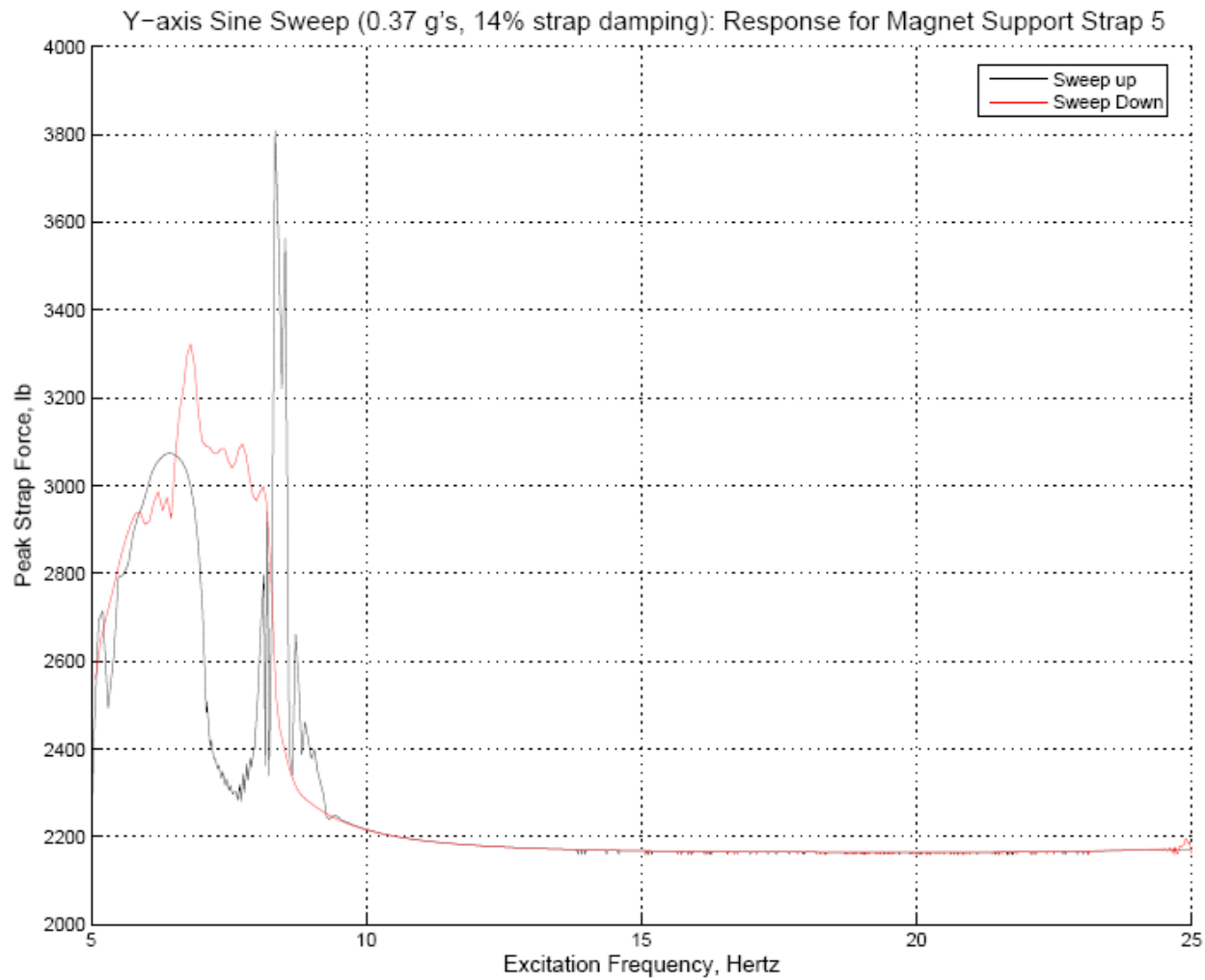
**Figure 9-190** Strap 2 frequency response envelope for y-axis 0.37 g excitation



**Figure 9-191** Strap 3 frequency response envelope for y-axis 0.37 g excitation



**Figure 9-192 Strap 4 frequency response envelope for y-axis 0.37 g excitation**



**Figure 9-193** Strap 5 frequency response envelope for y-axis 0.37 g excitation

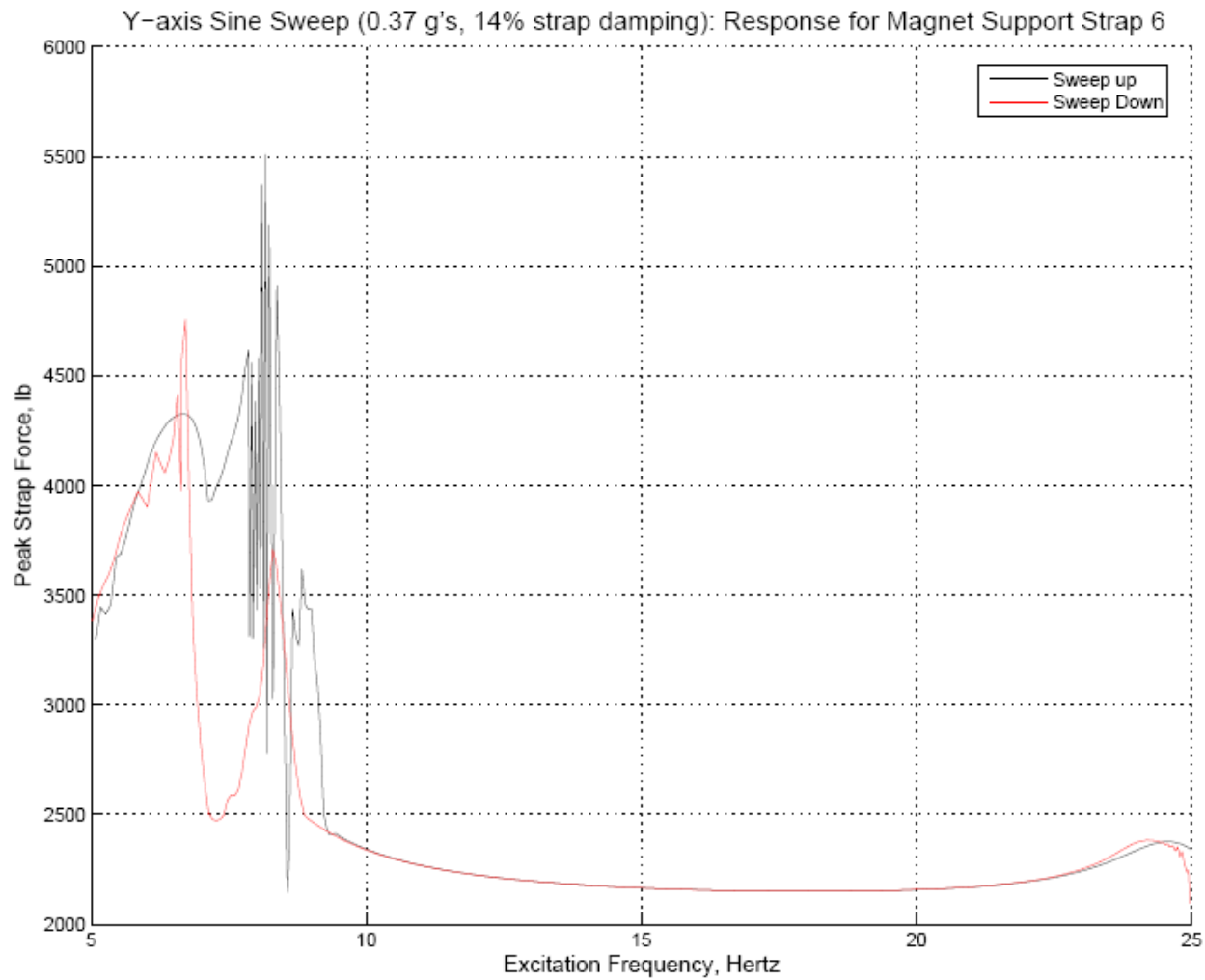
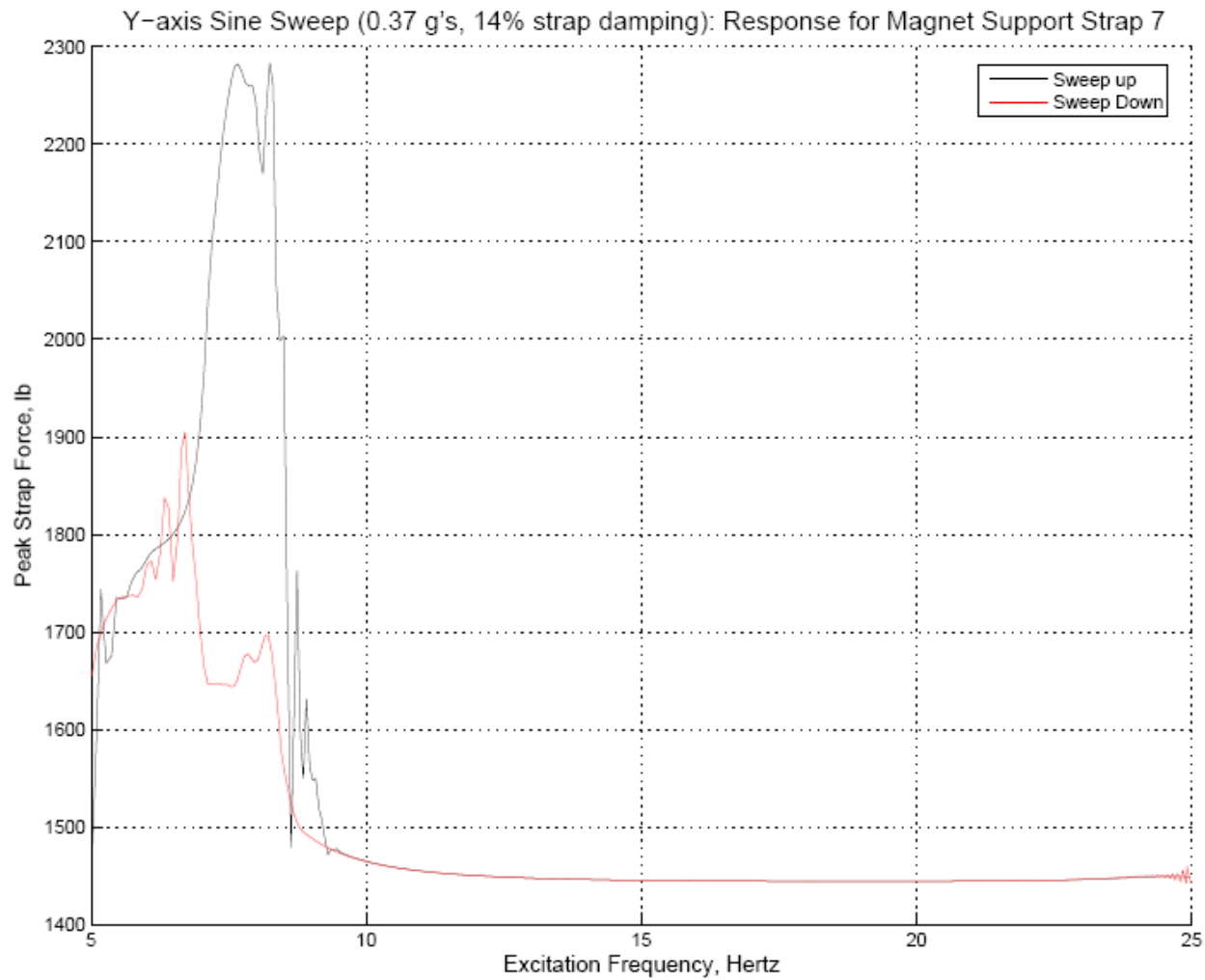


Figure 9-194 Strap 6 frequency response envelope for y-axis 0.37 g excitation



**Figure 9-195 Strap 7 frequency response envelope for y-axis 0.37 g excitation**

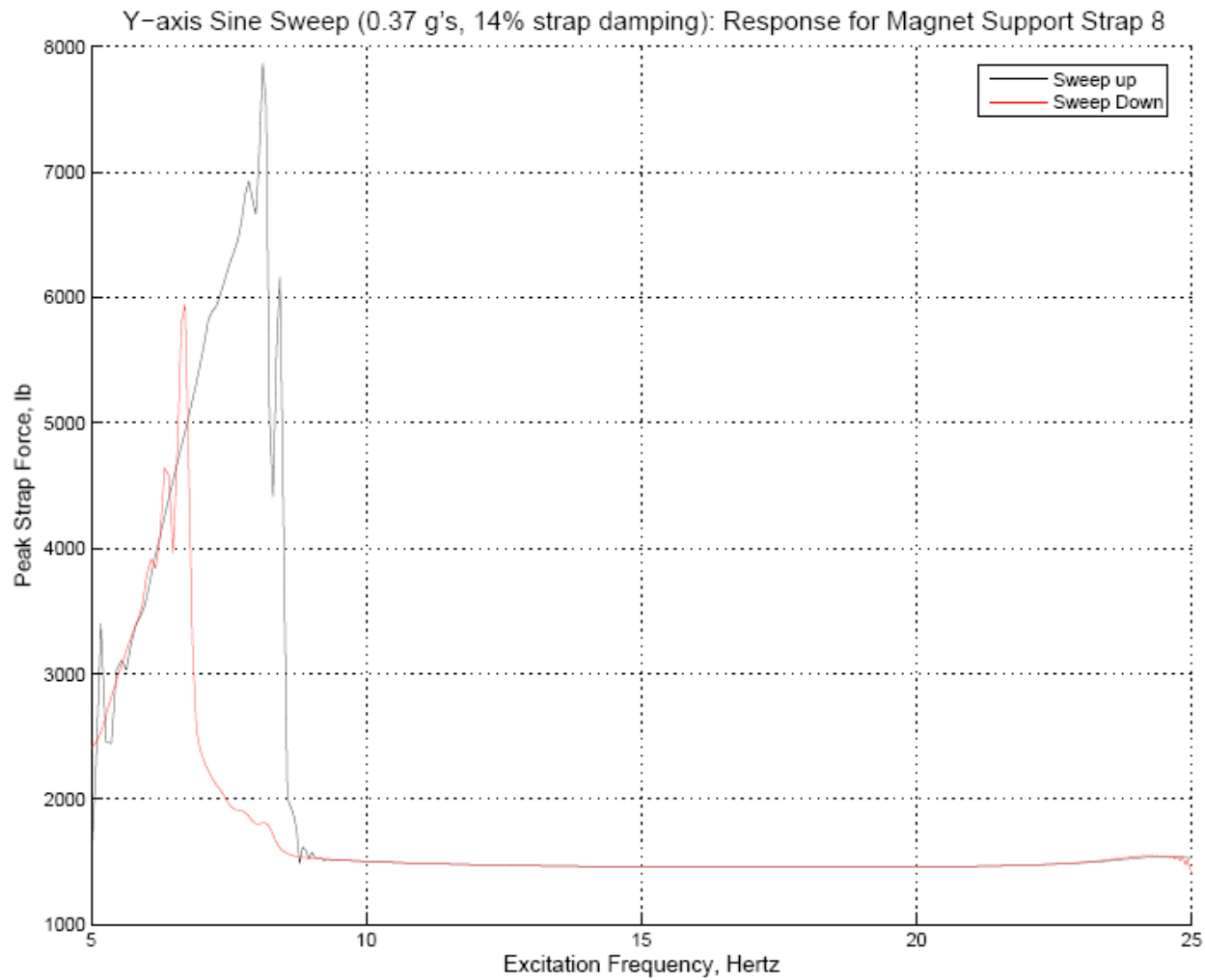


Figure 9-196 Strap 8 frequency response envelope for y-axis 0.37 g excitation

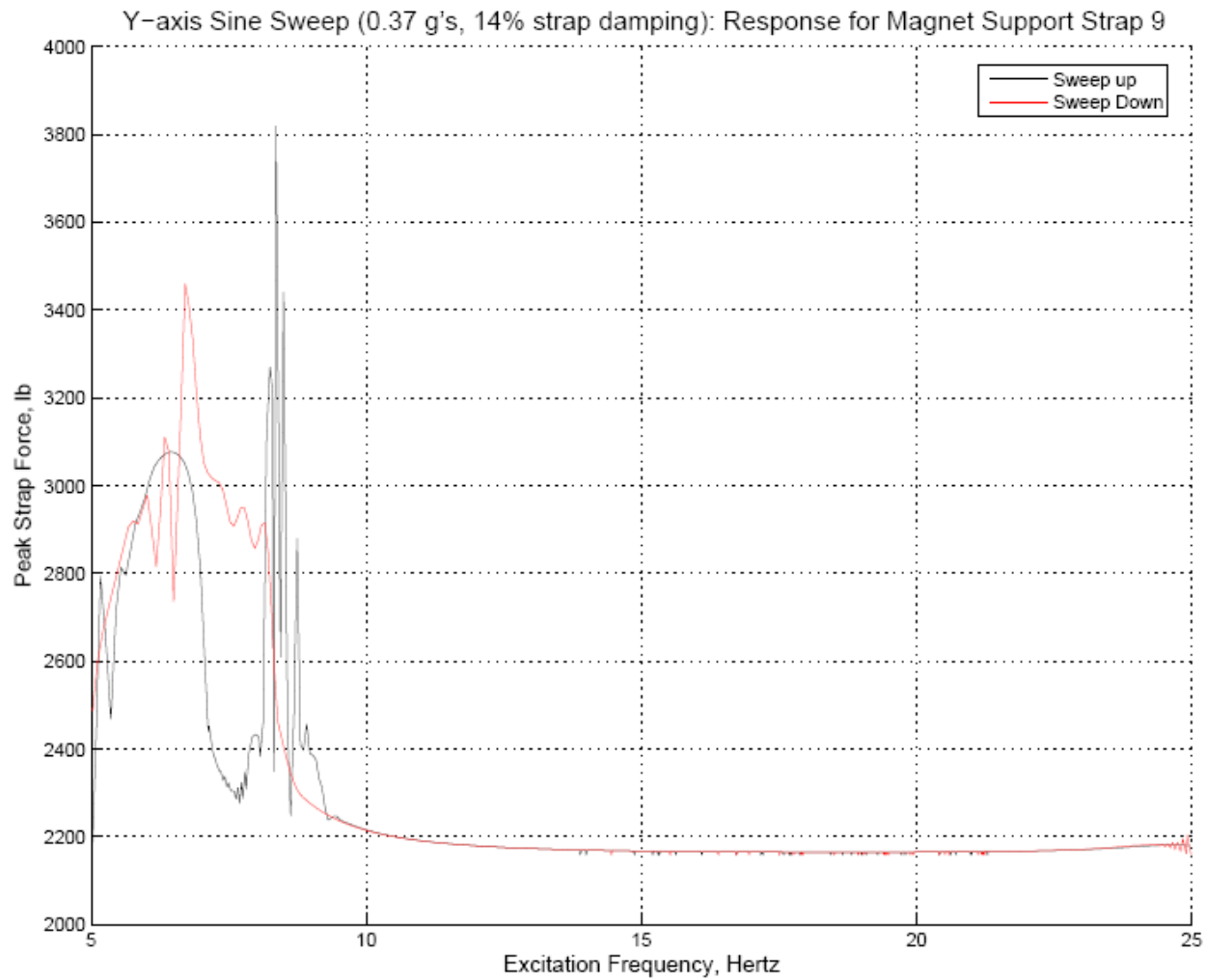


Figure 9-197 Strap 9 frequency response envelope for y-axis 0.37 g excitation



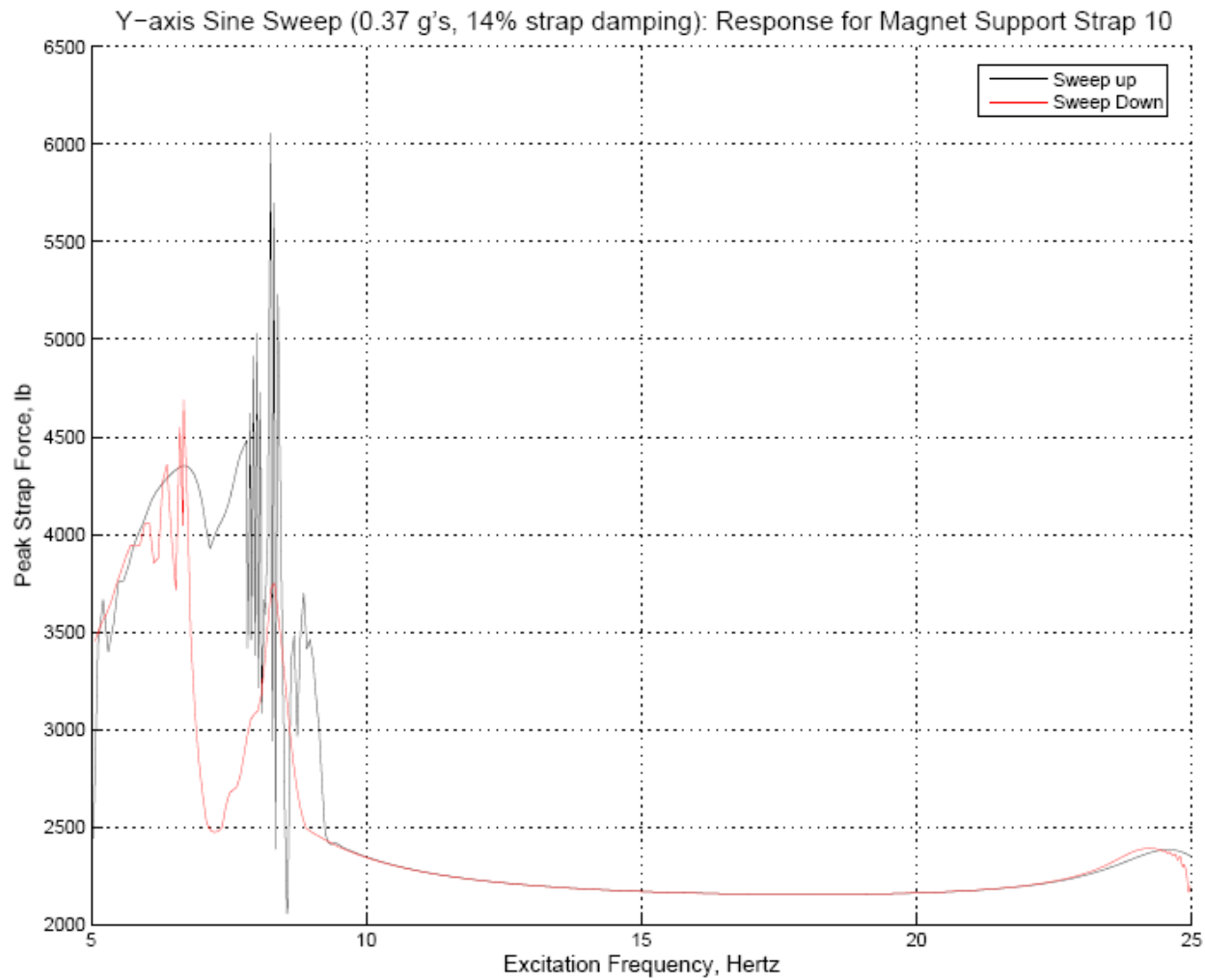


Figure 9-198 Strap 10 frequency response envelope for y-axis 0.37 g excitation

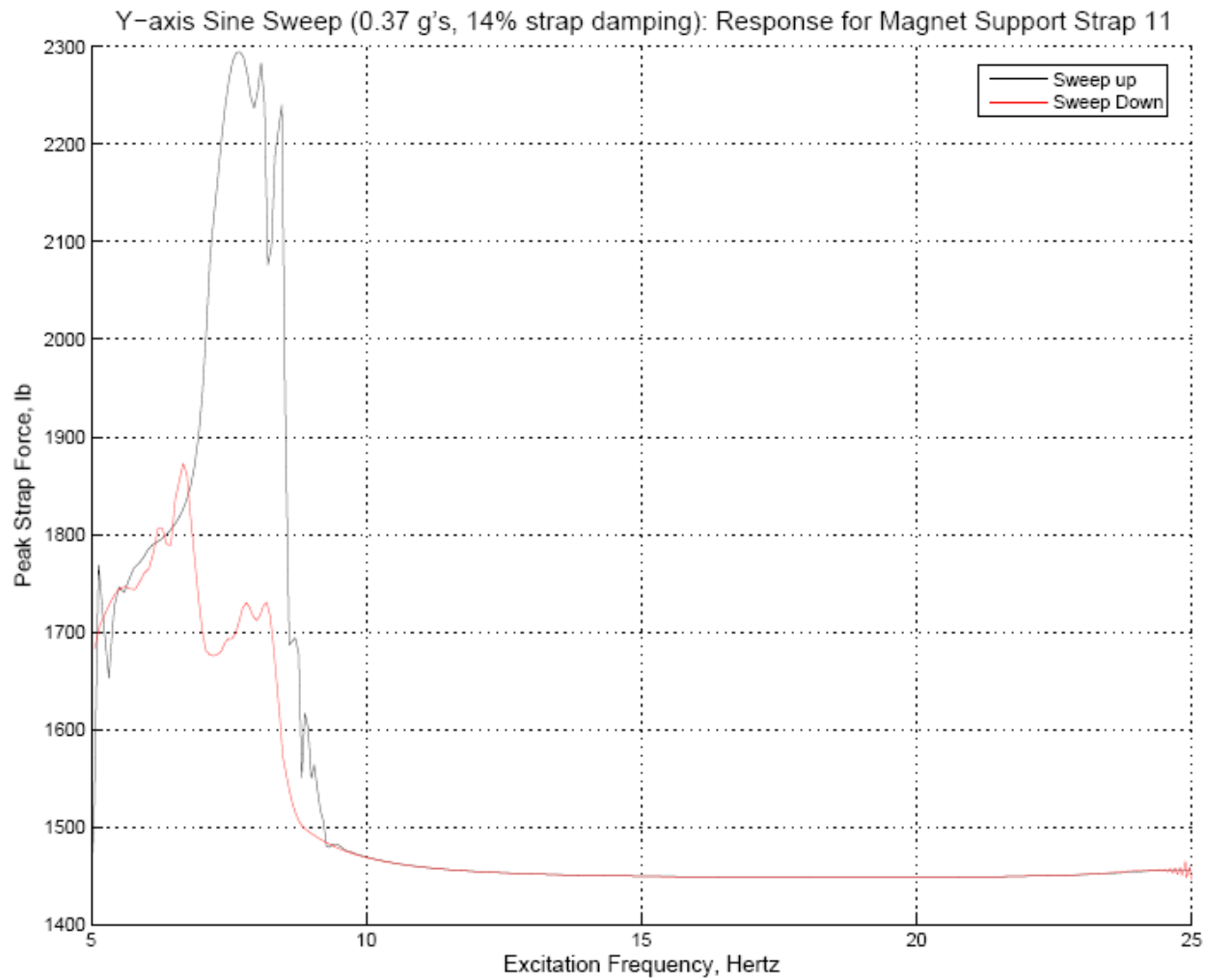
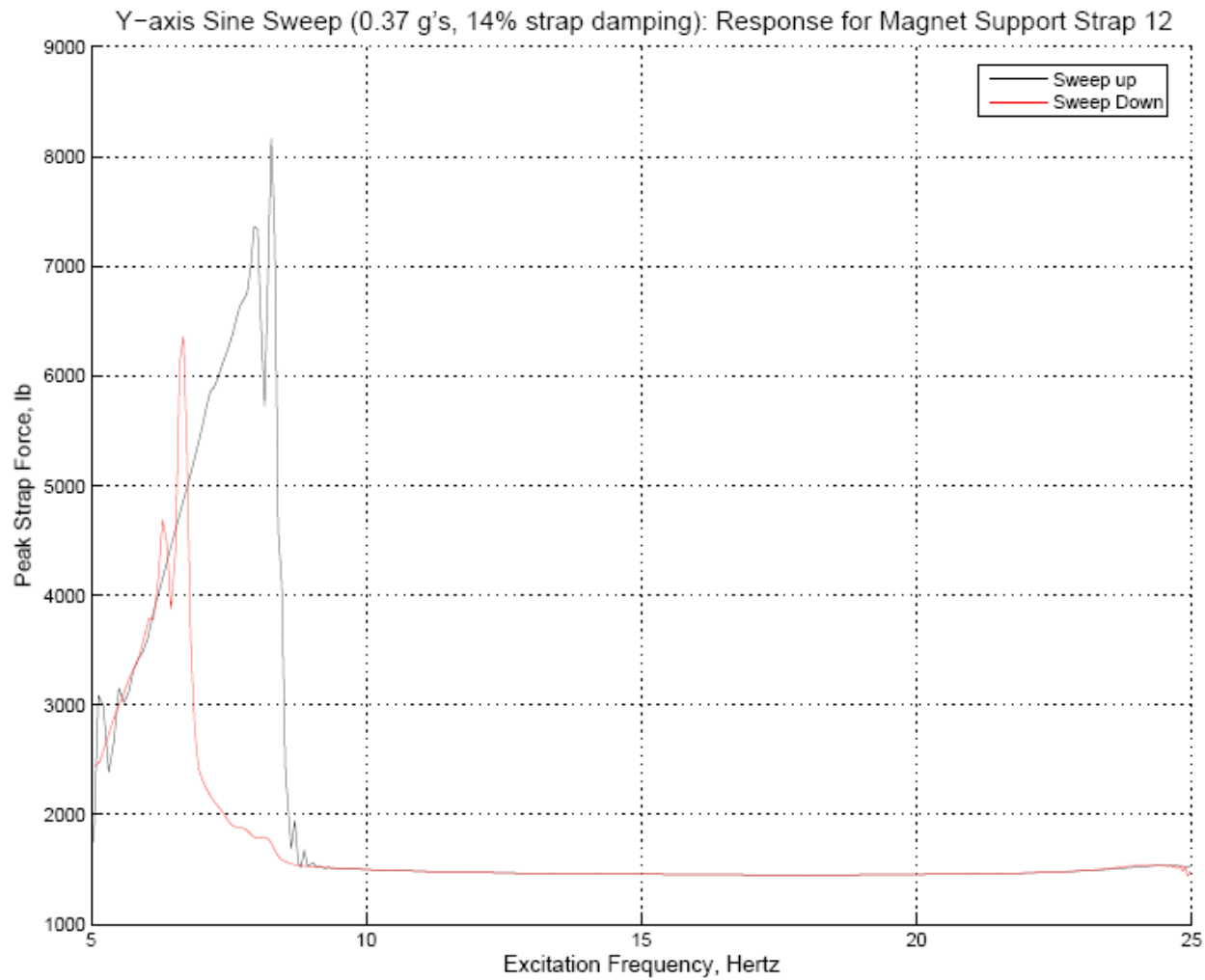


Figure 9-199 Strap 11 frequency response envelope for y-axis 0.37 g excitation



**Figure 9-200** Strap 12 frequency response envelope for y-axis 0.37 g excitation

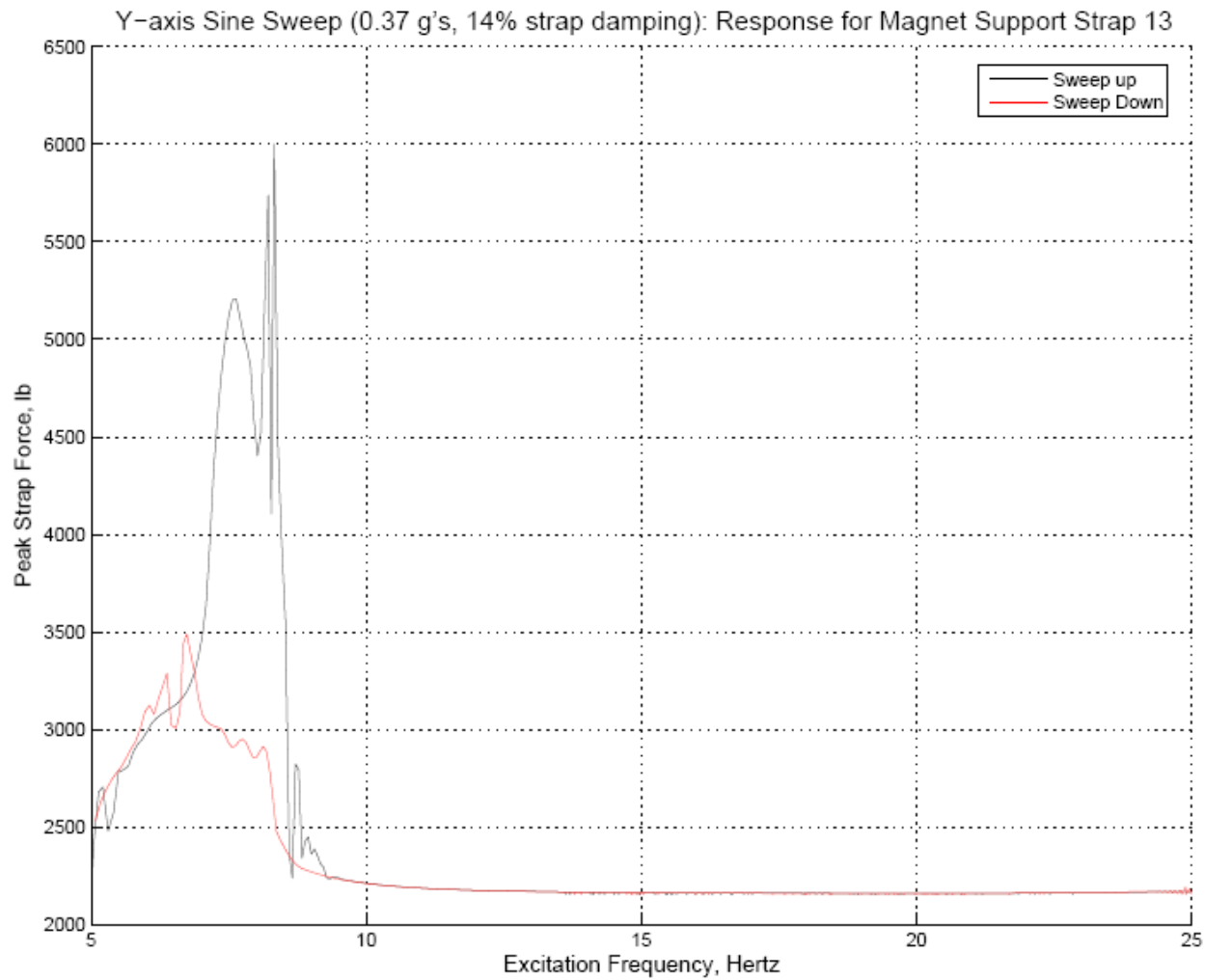
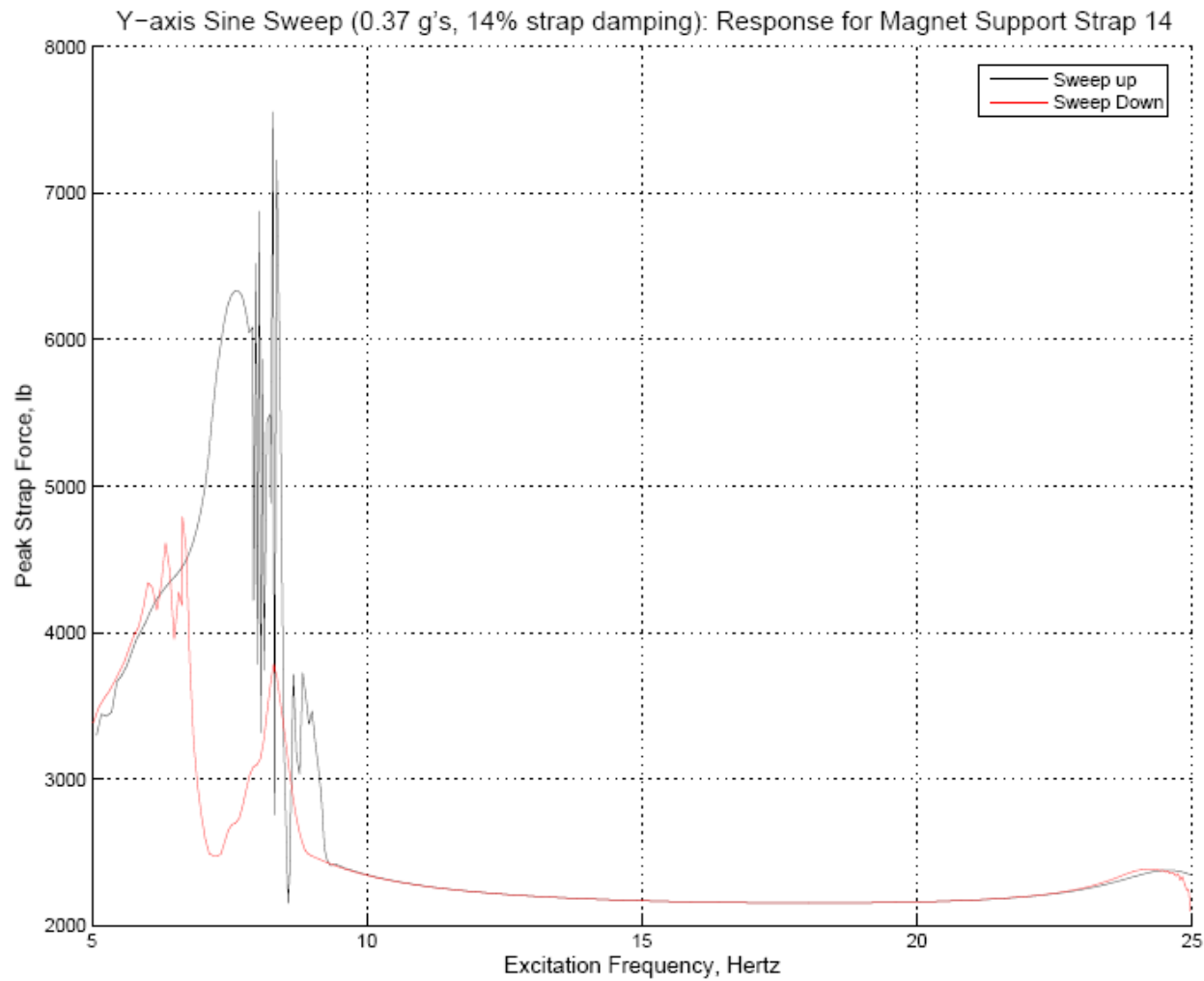


Figure 9-201 Strap 13 frequency response envelope for y-axis 0.37 g excitation



**Figure 9-202** Strap 14 frequency response envelope for y-axis 0.37 g excitation

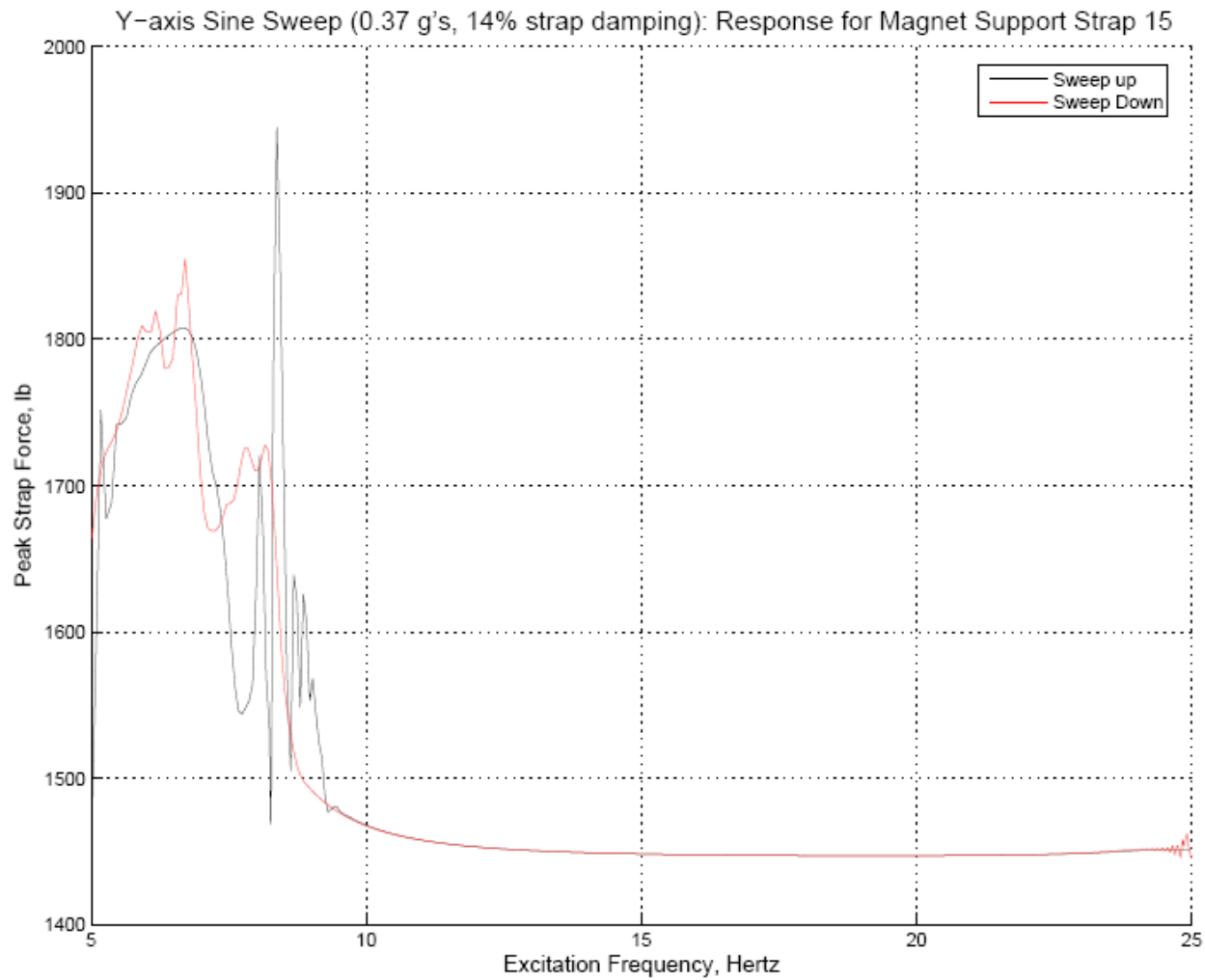


Figure 9-203 Strap 15 frequency response envelope for y-axis 0.37 g excitation

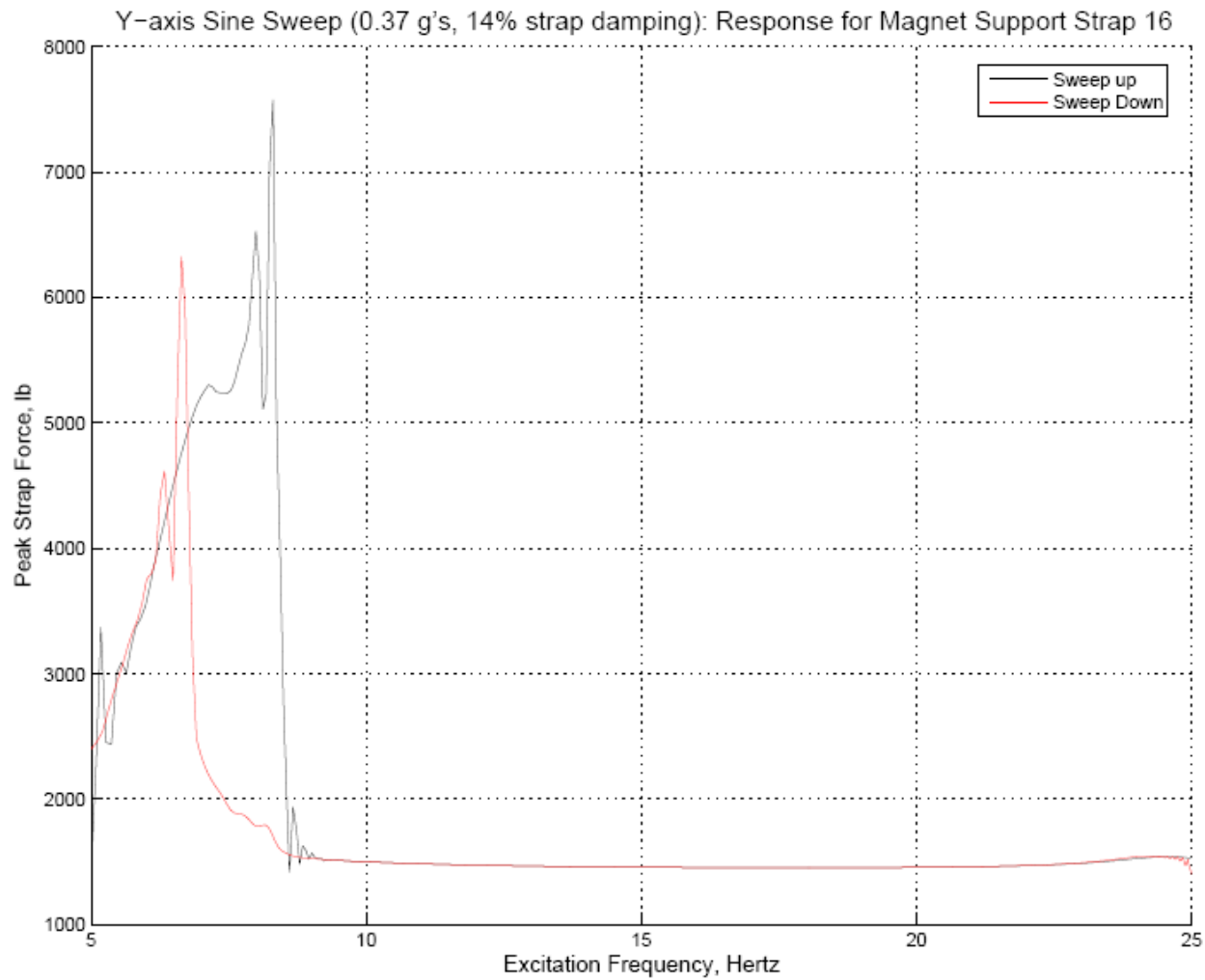


Figure 9-204 Strap 16 frequency response envelope for y-axis 0.37 g excitation

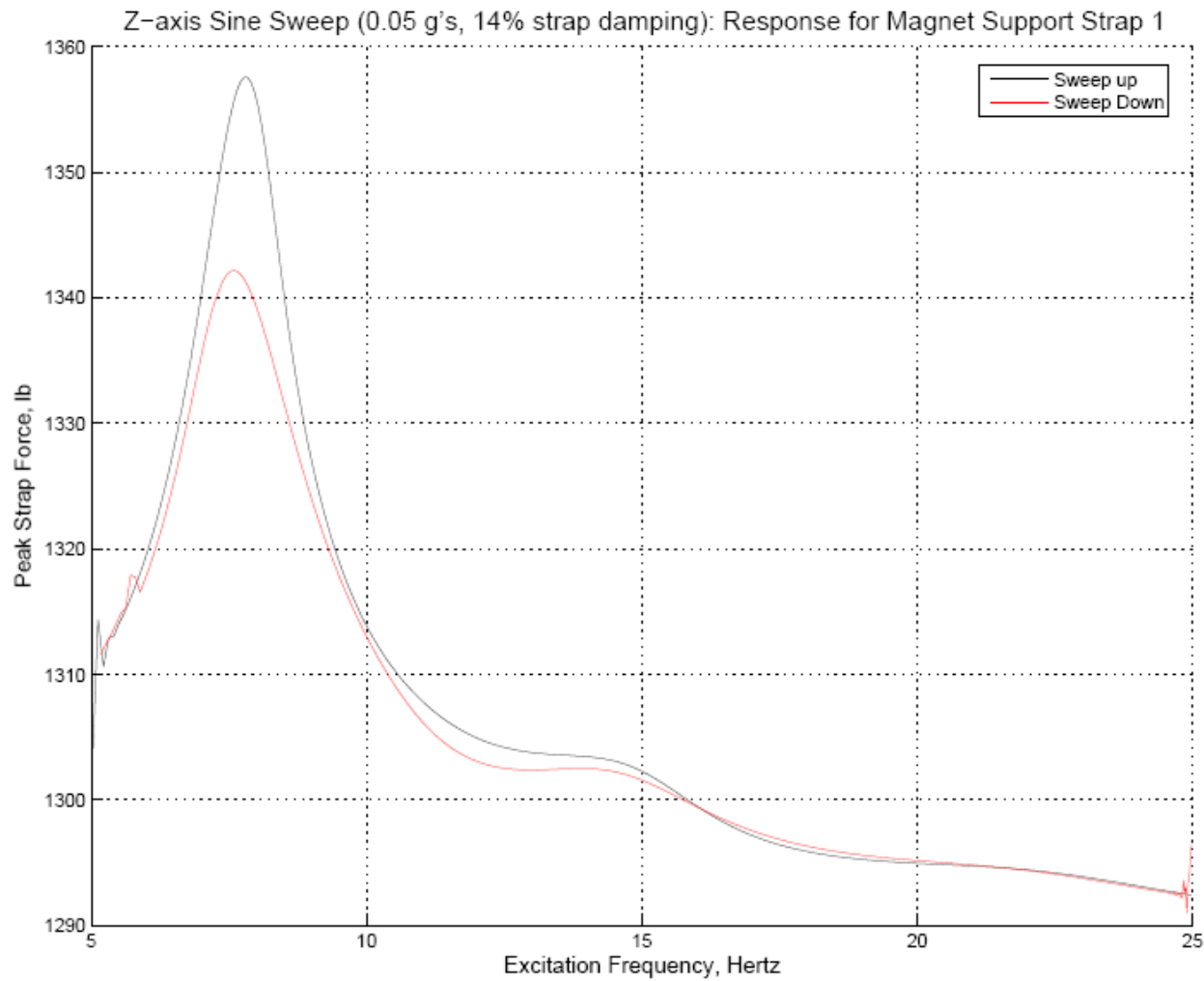


Figure 9-205 Strap 1 frequency response envelope for z-axis 0.05 g excitation



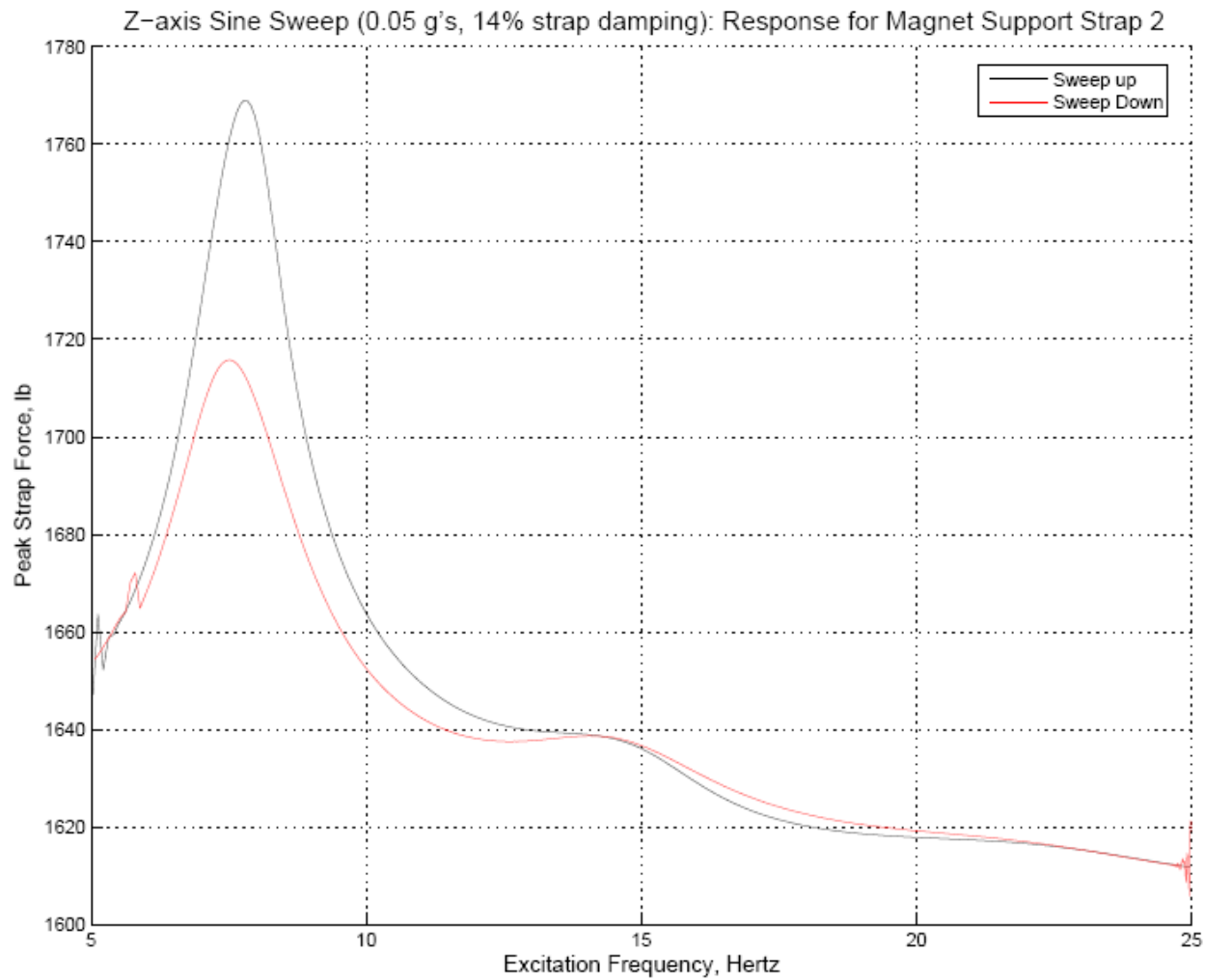


Figure 9-206 Strap 2 frequency response envelope for z-axis 0.05 g excitation

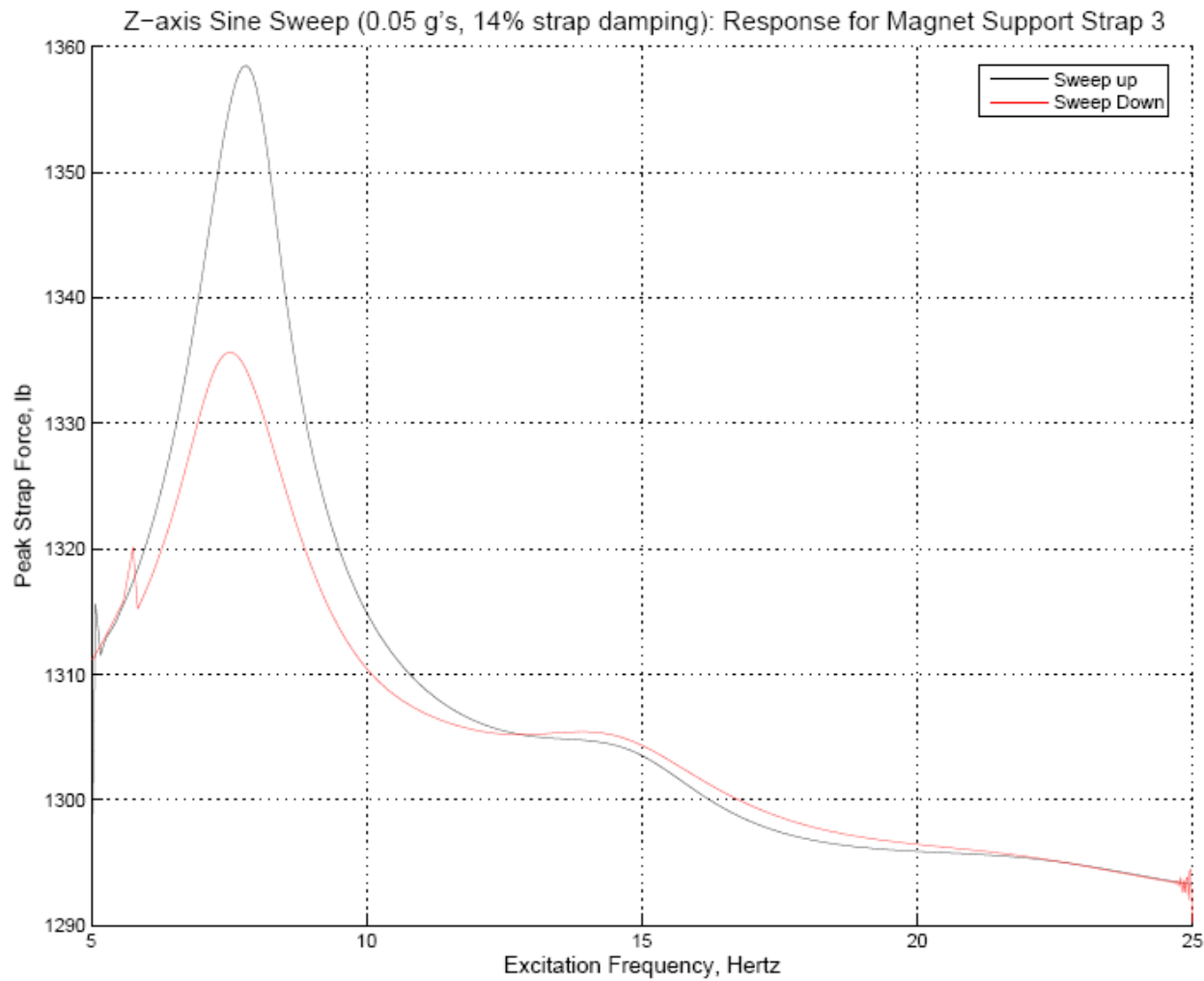
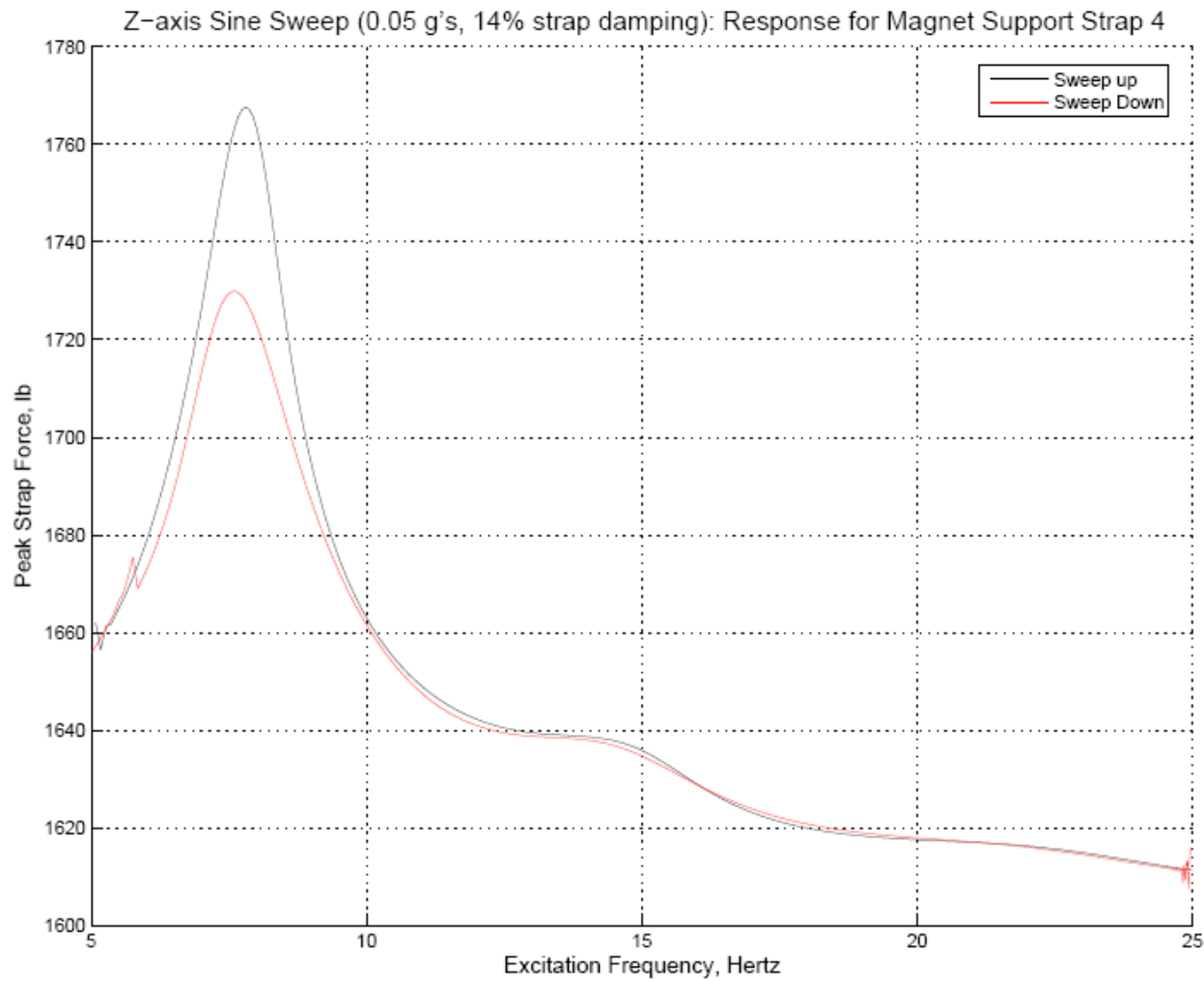
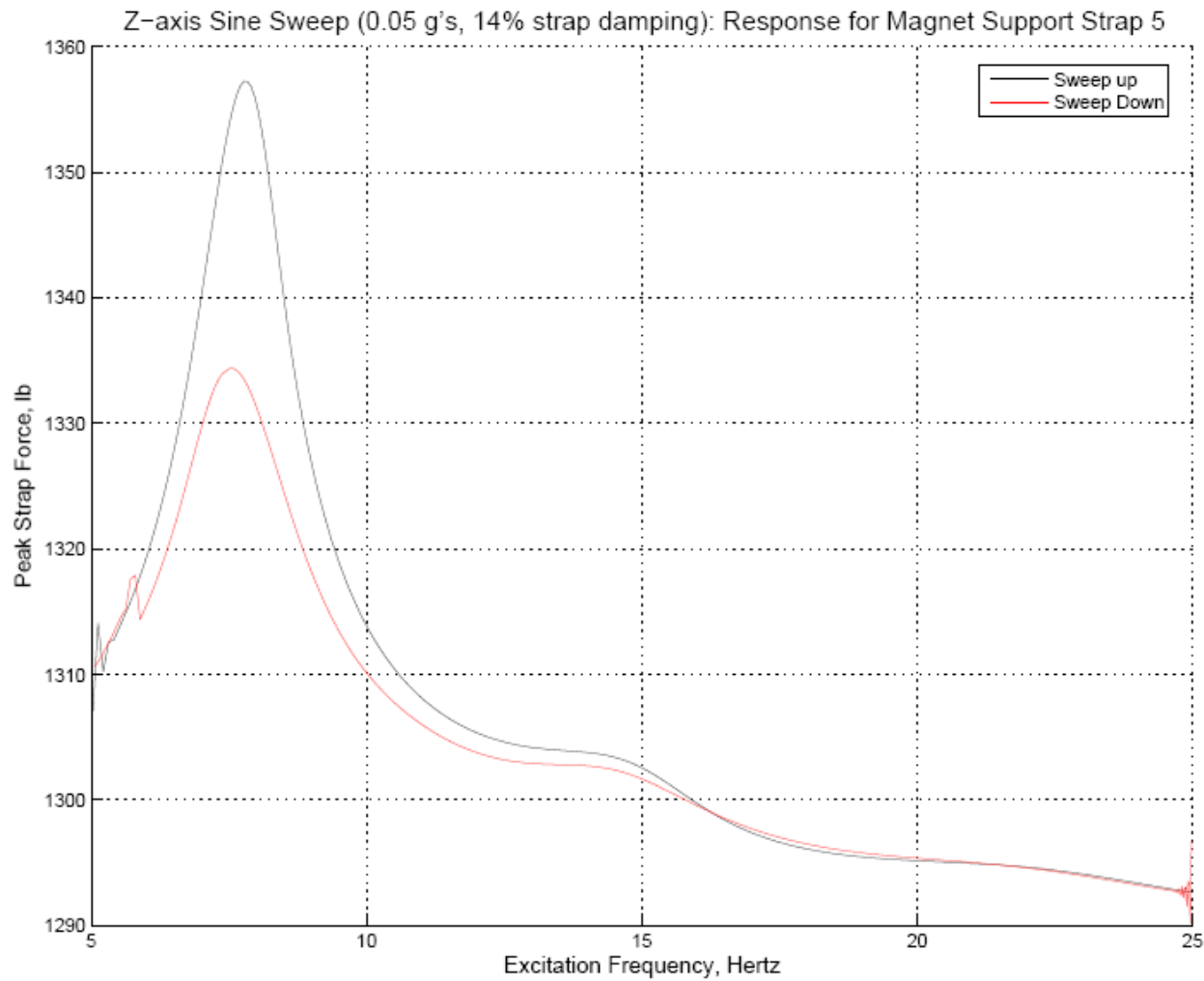


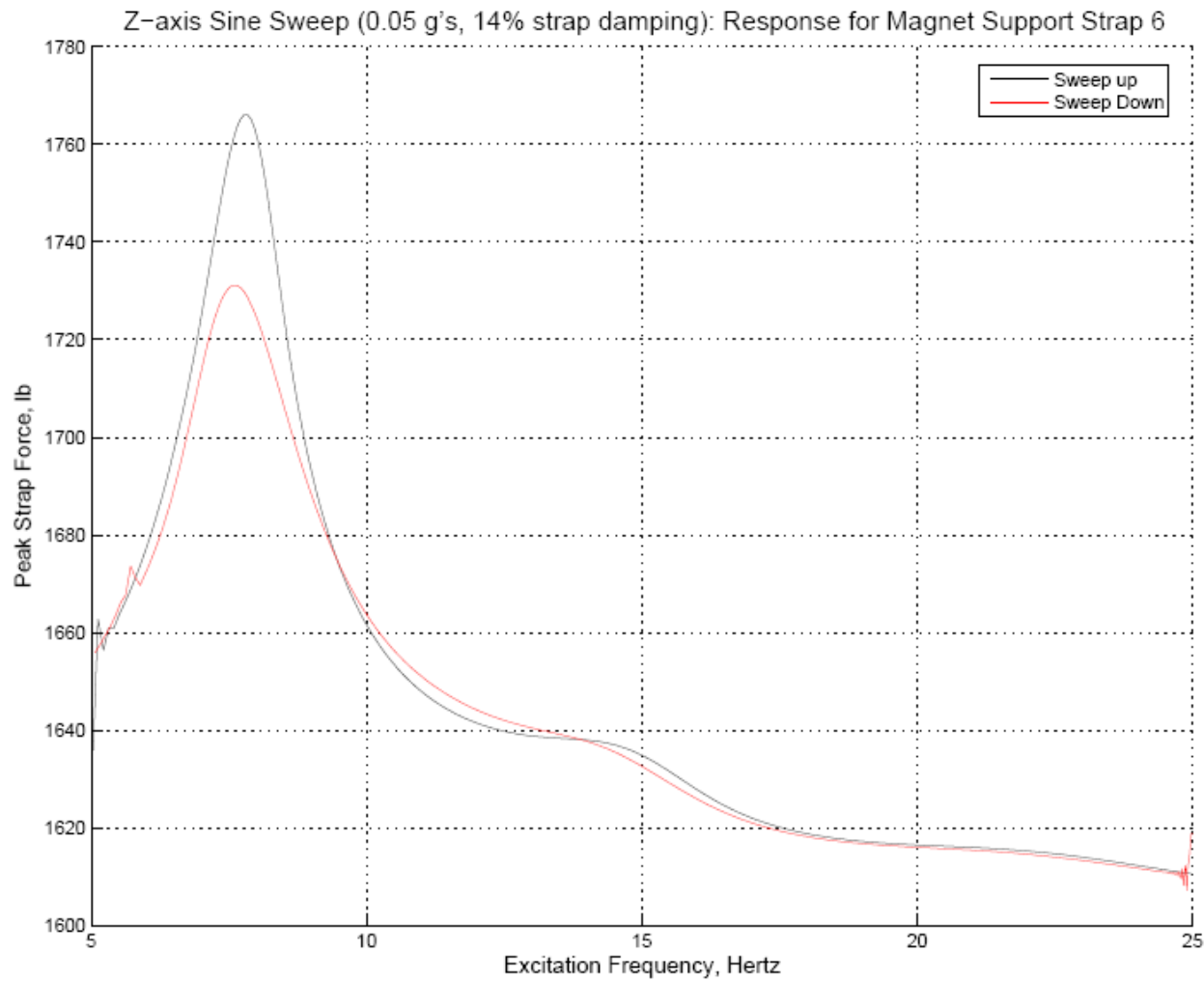
Figure 9-207 Strap 3 frequency response envelope for z-axis 0.05 g excitation



**Figure 9-208 Strap 4 frequency response envelope for z-axis 0.05 g excitation**



**Figure 9-209 Strap 5 frequency response envelope for z-axis 0.05 g excitation**



**Figure 9-210** Strap 6 frequency response envelope for z-axis 0.05 g excitation

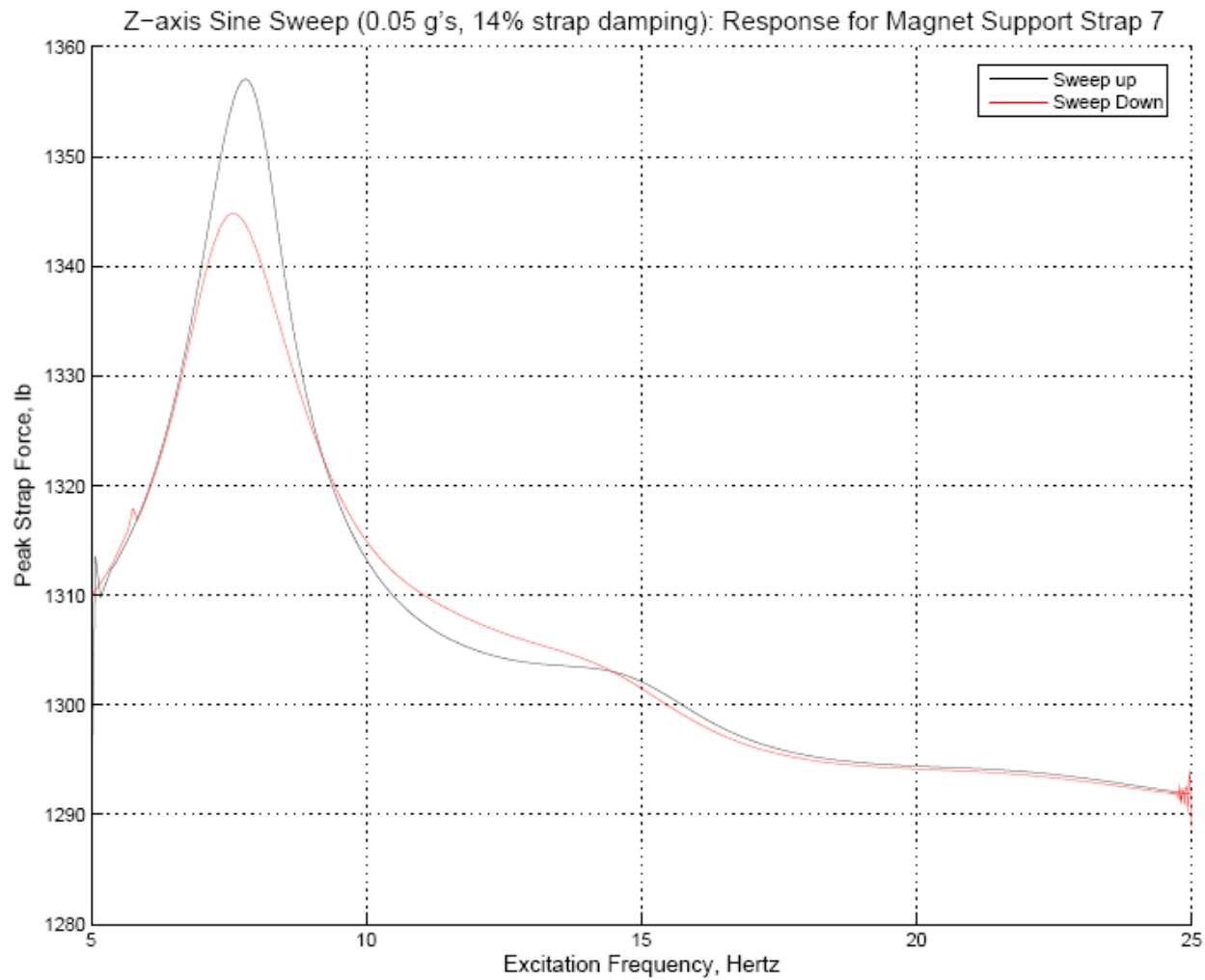


Figure 9-211 Strap 7 frequency response envelope for z-axis 0.05 g excitation

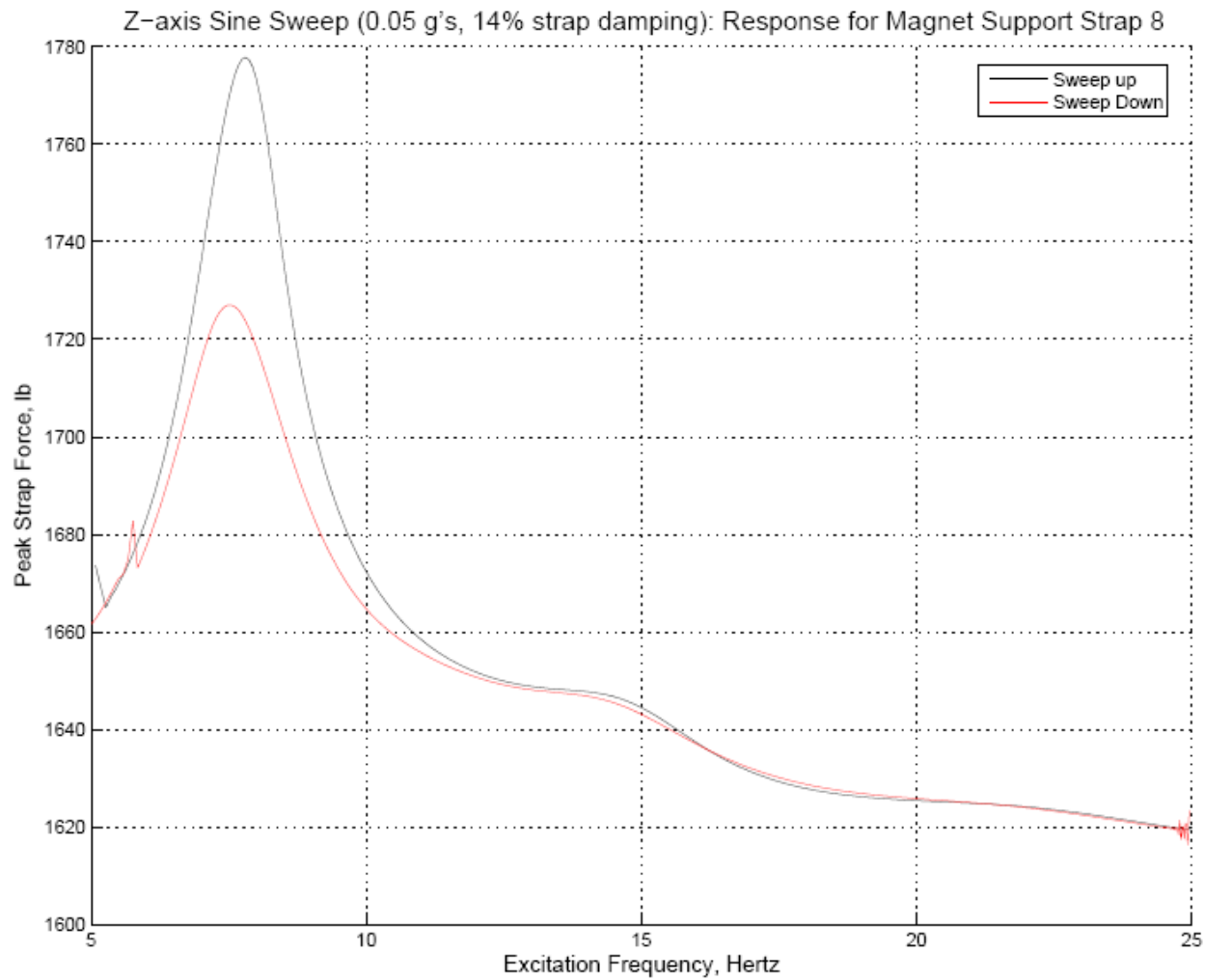


Figure 9-212 Strap 8 frequency response envelope for z-axis 0.05 g excitation

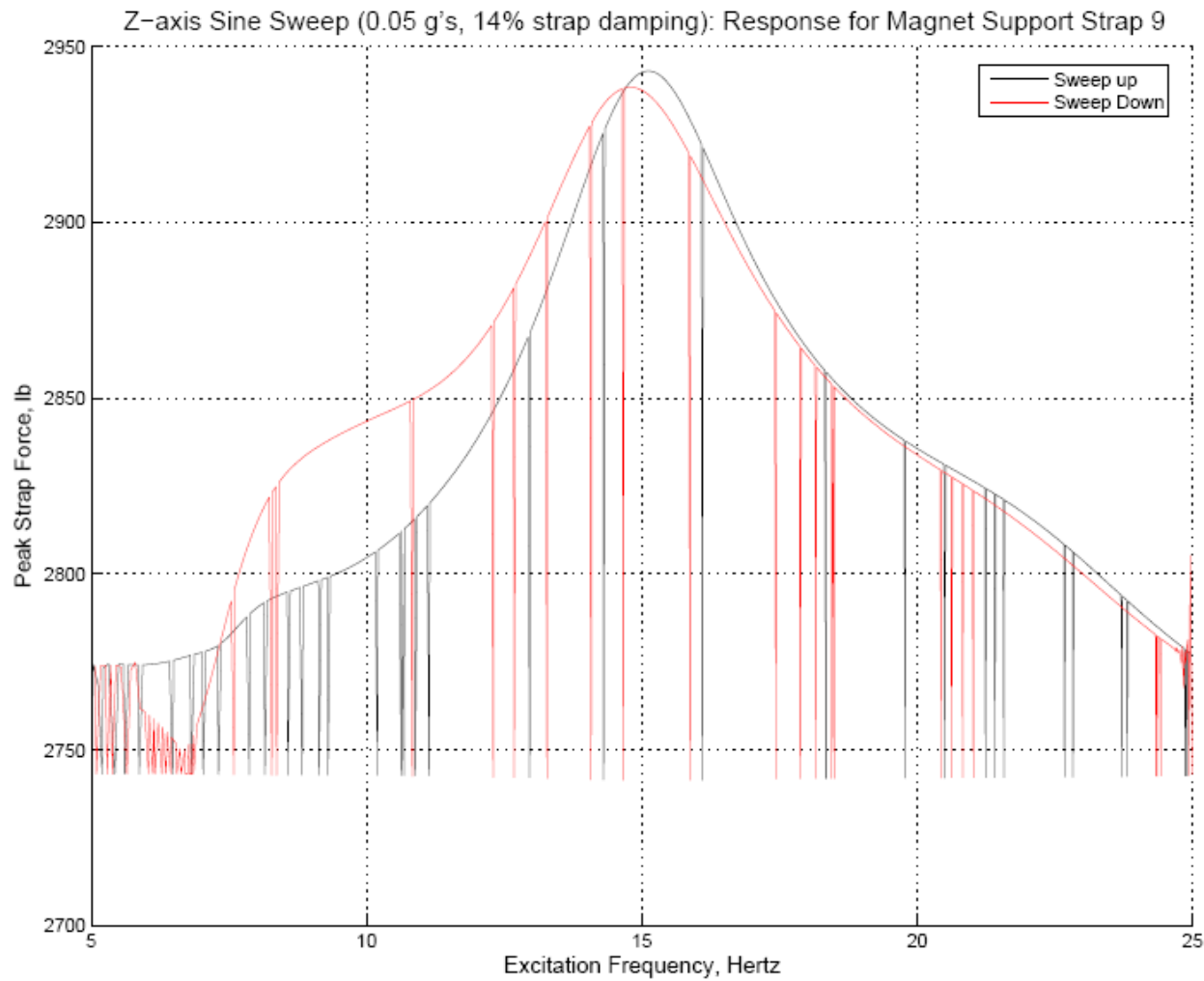


Figure 9-213 Strap 9 frequency response envelope for z-axis 0.05 g excitation



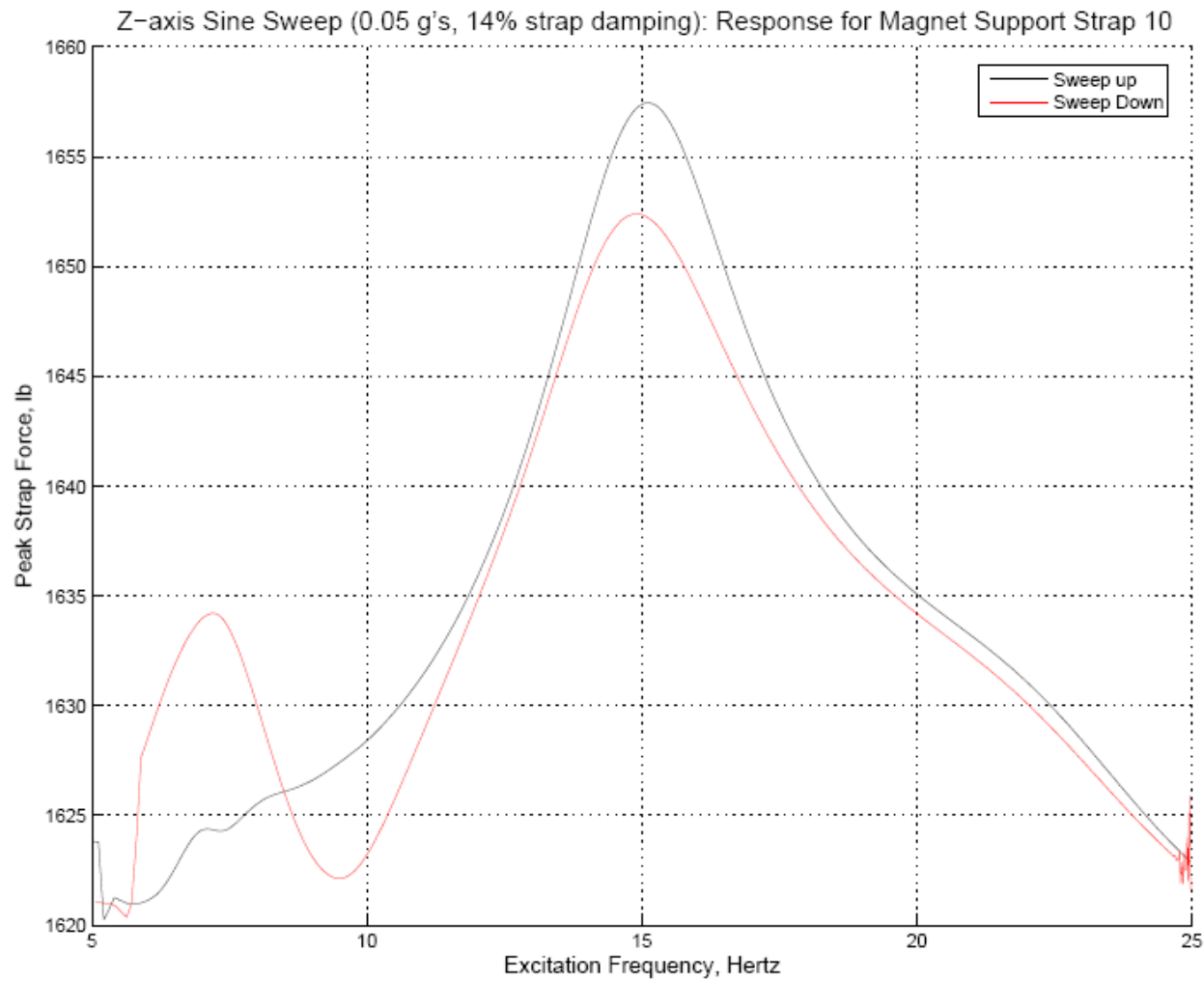


Figure 9-214 Strap 10 frequency response envelope for z-axis 0.05 g excitation

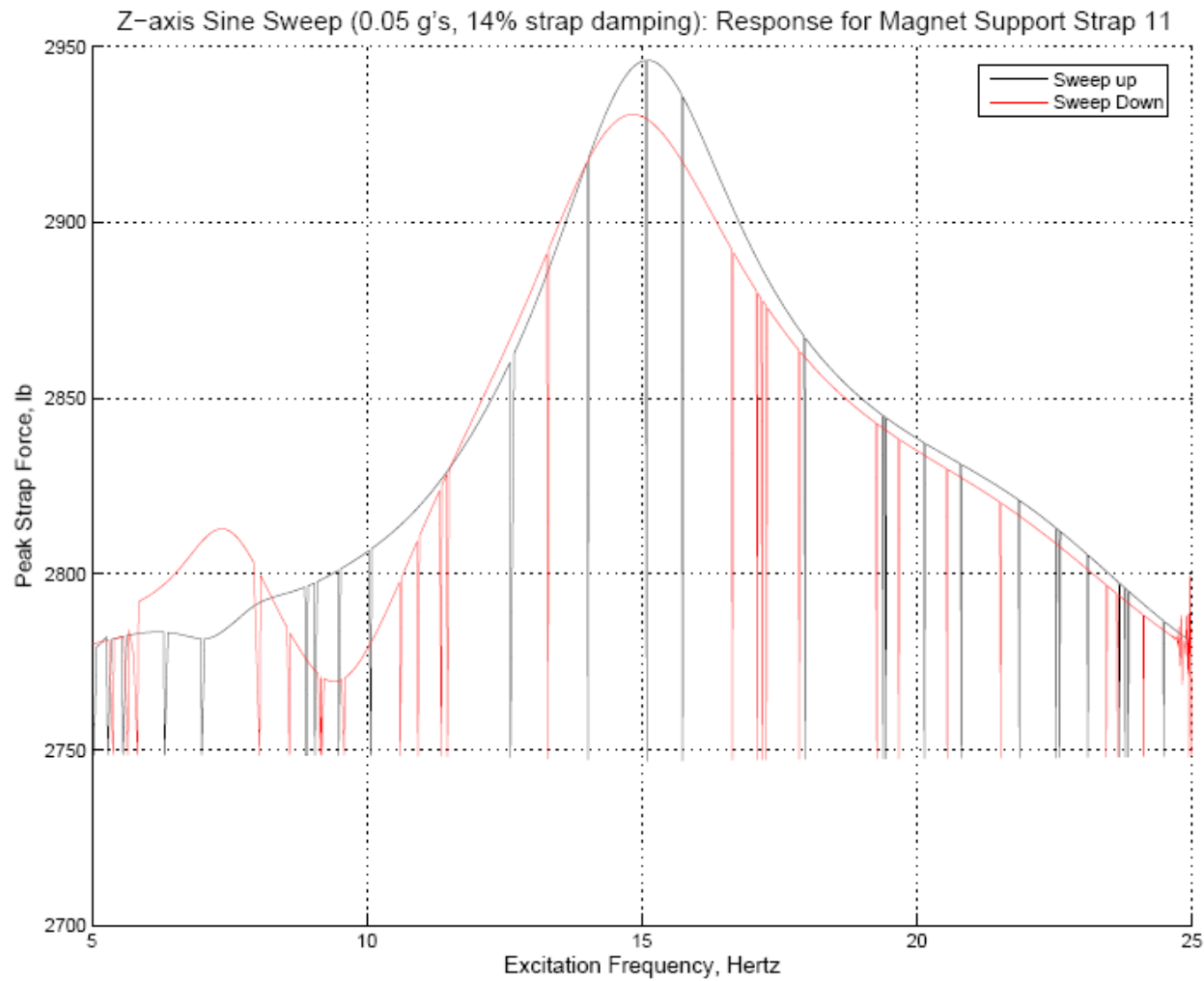


Figure 9-215 Strap 11 frequency response envelope for z-axis 0.05 g excitation

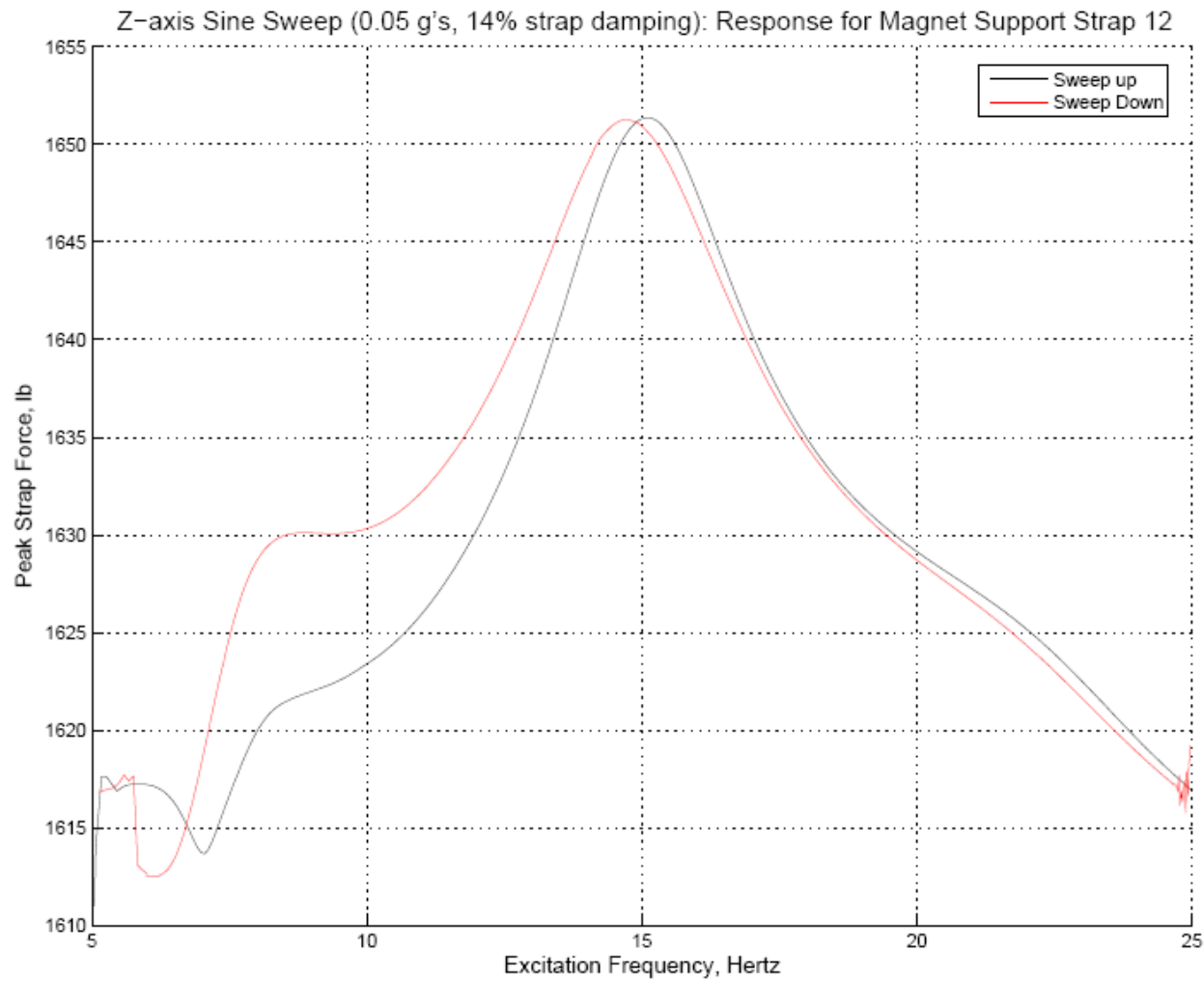


Figure 9-216 Strap 12 frequency response envelope for z-axis 0.05 g excitation

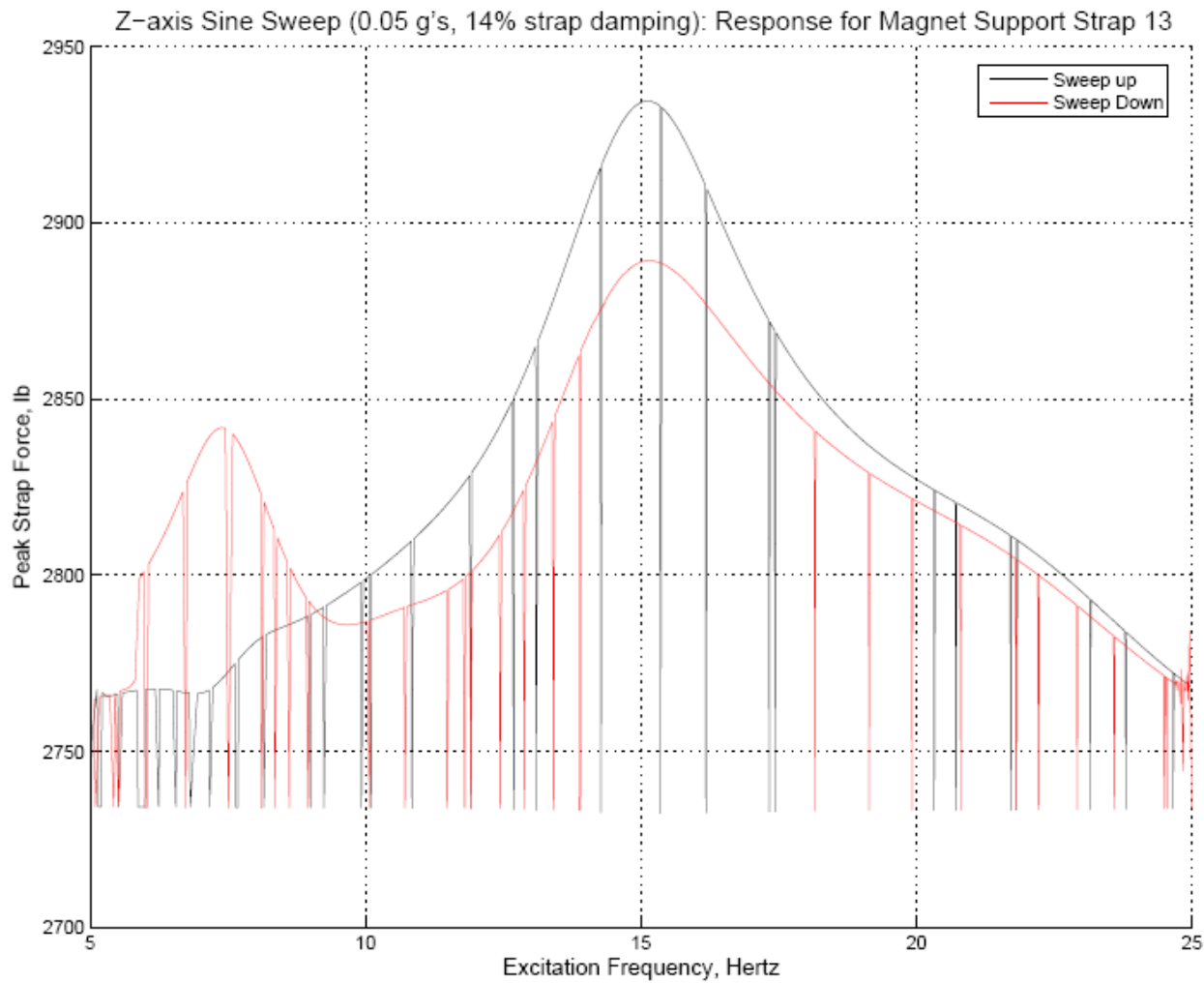


Figure 9-217 Strap 13 frequency response envelope for z-axis 0.05 g excitation

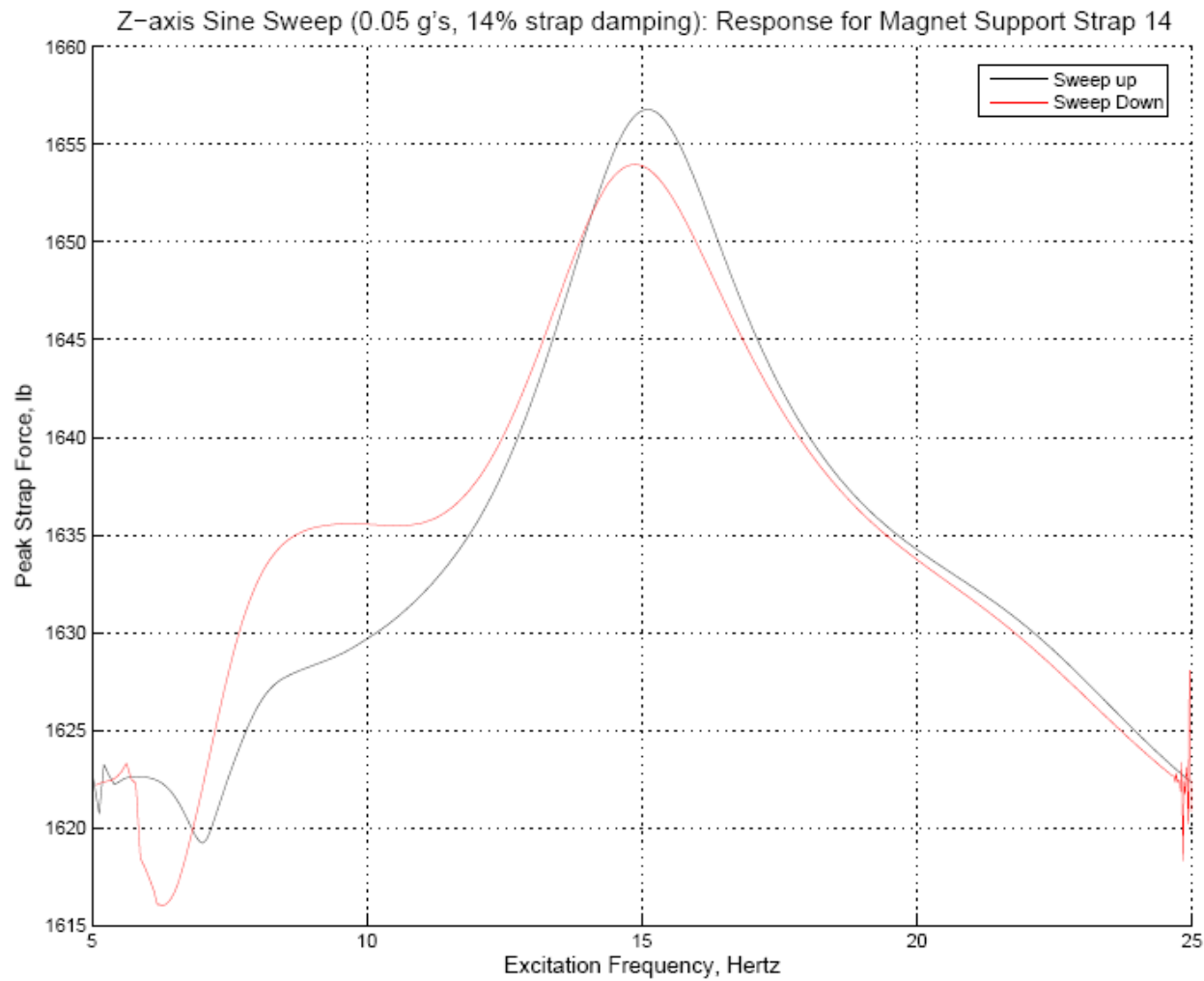


Figure 9-218 Strap 14 frequency response envelope for z-axis 0.05 g excitation

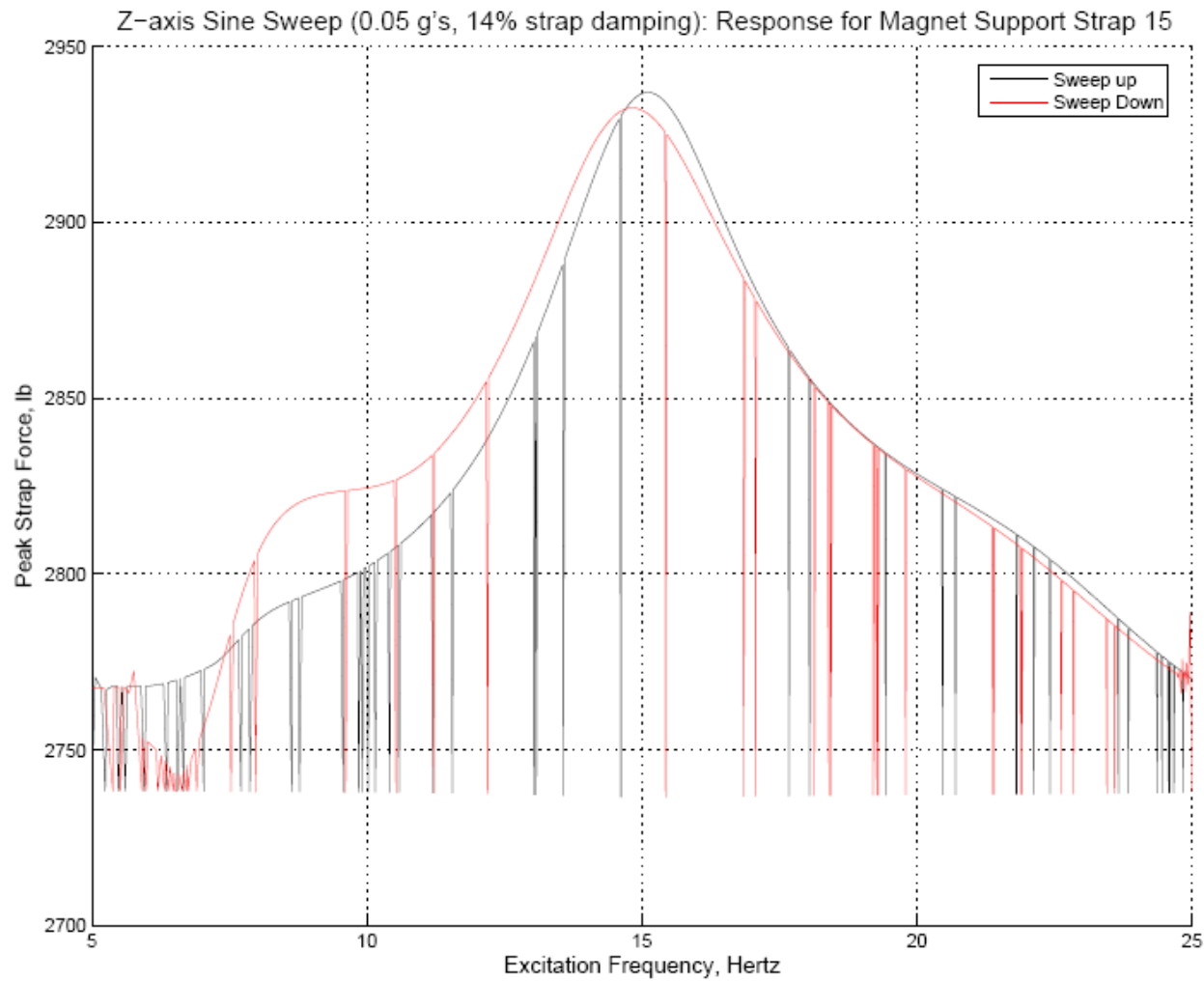


Figure 9-219 Strap 15 frequency response envelope for z-axis 0.05 g excitation

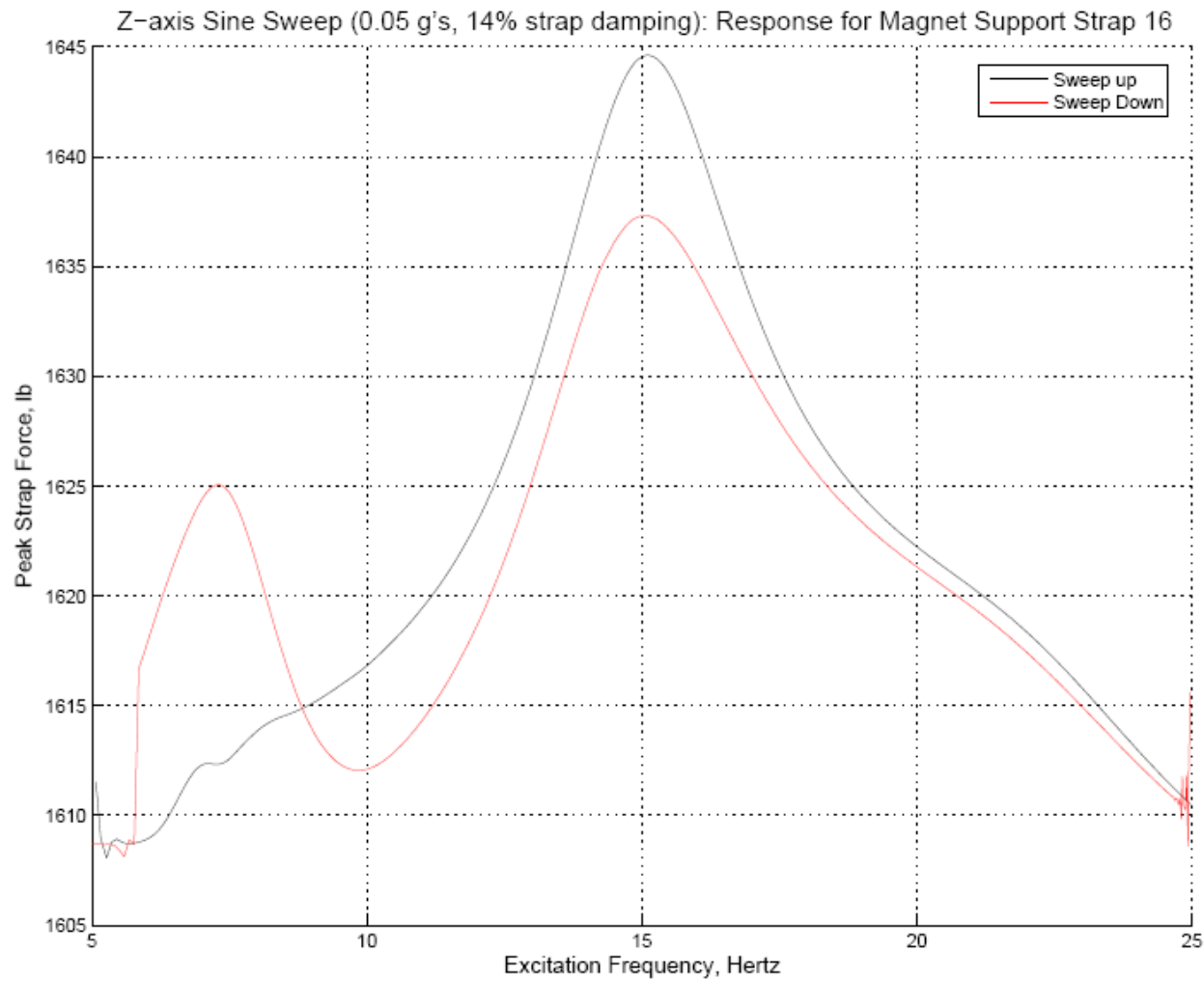


Figure 9-220 Strap 16 frequency response envelope for z-axis 0.05 g excitation

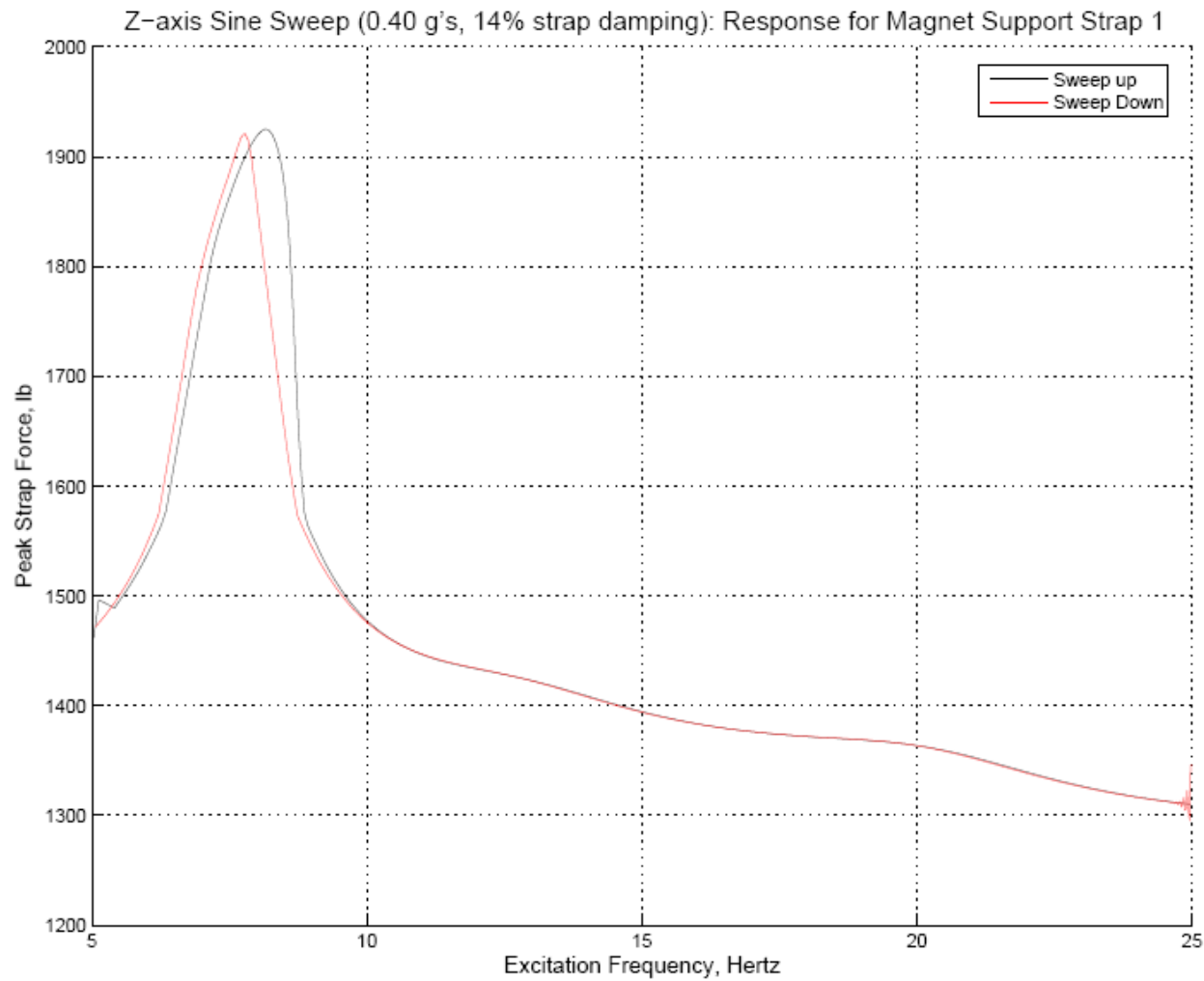
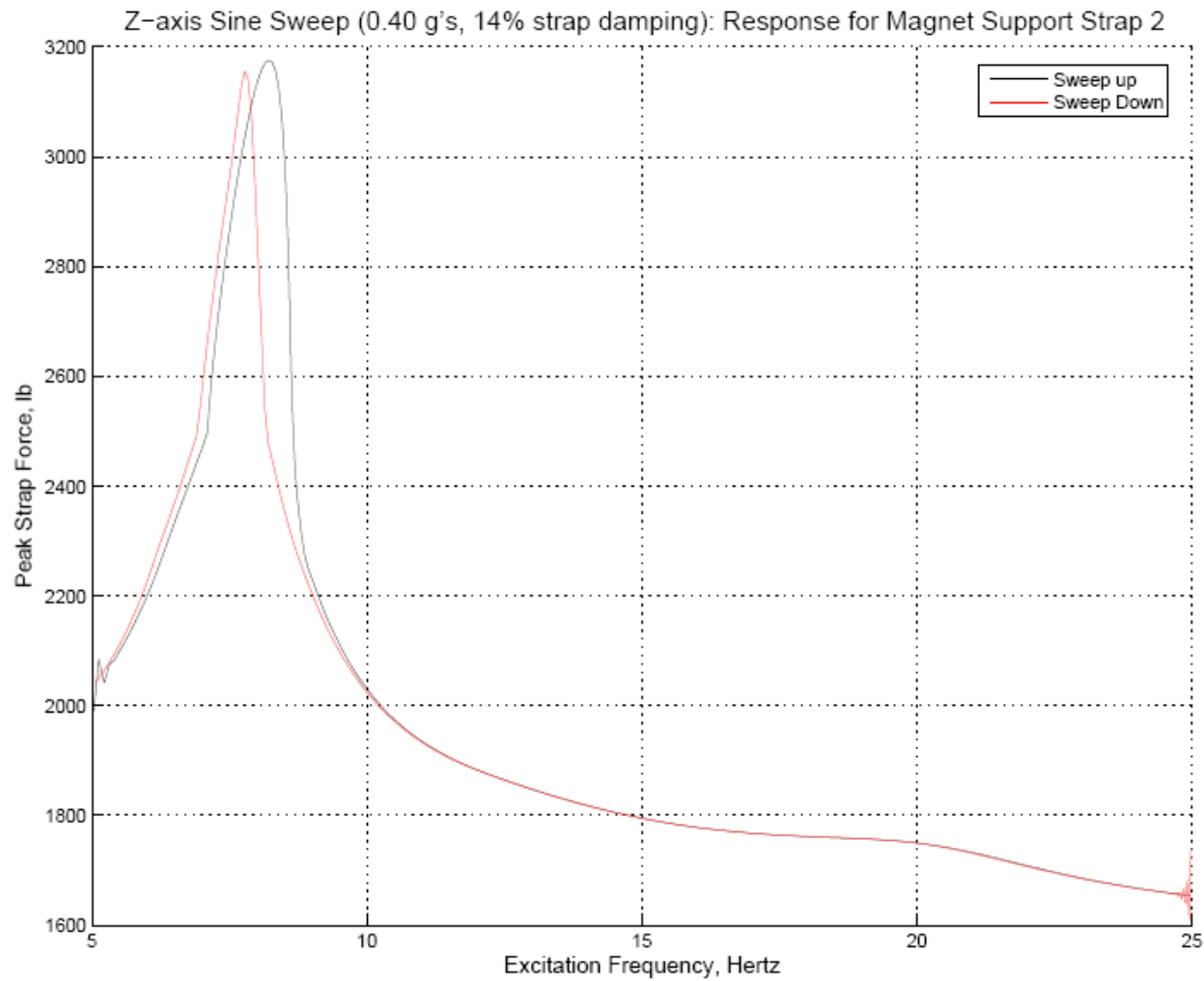


Figure 9-221 Strap 1 frequency response envelope for z-axis 0.40 g excitation





**Figure 9-222 Strap 2 frequency response envelope for z-axis 0.40 g excitation**

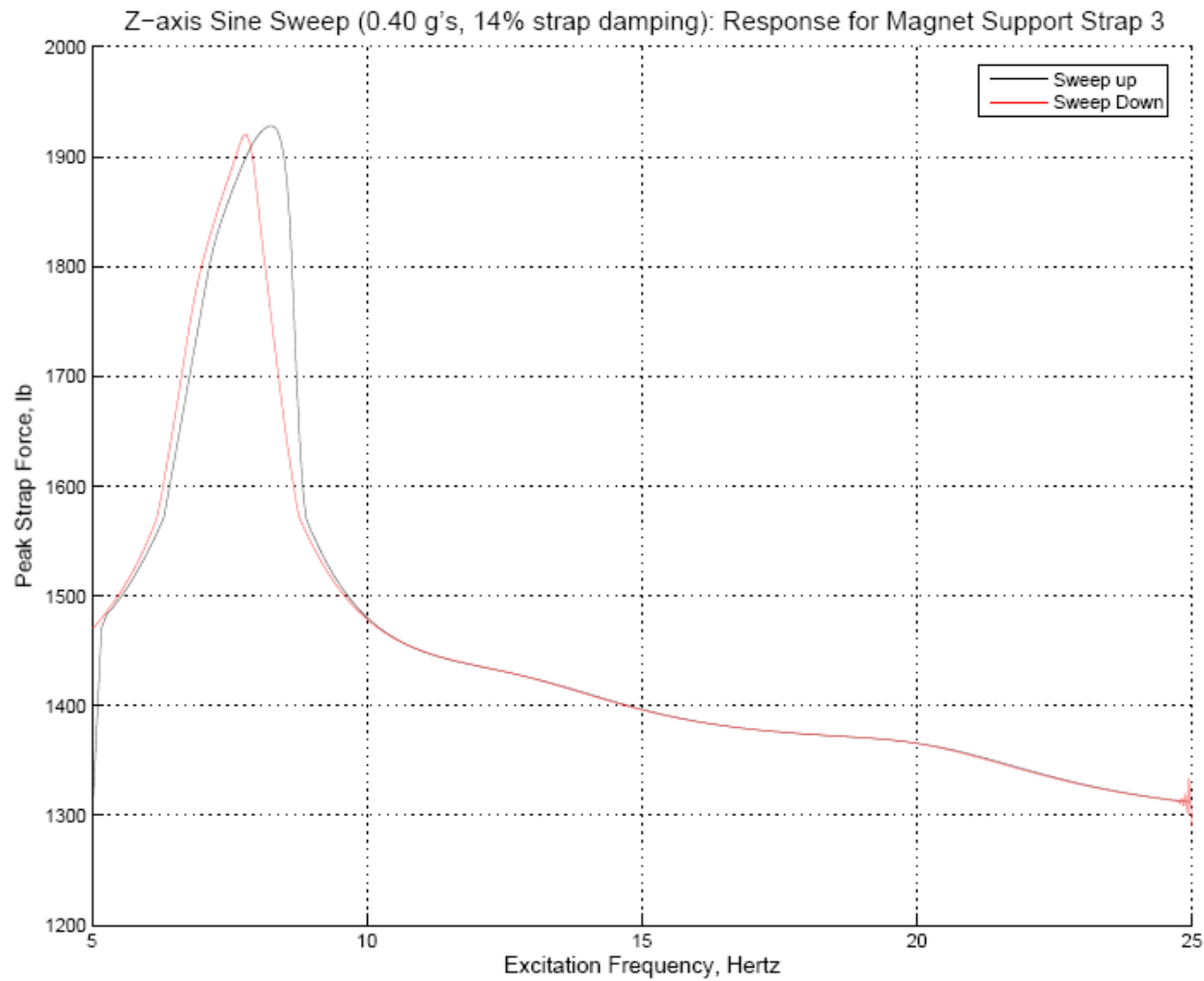


Figure 9-223 Strap 3 frequency response envelope for z-axis 0.40 g excitation

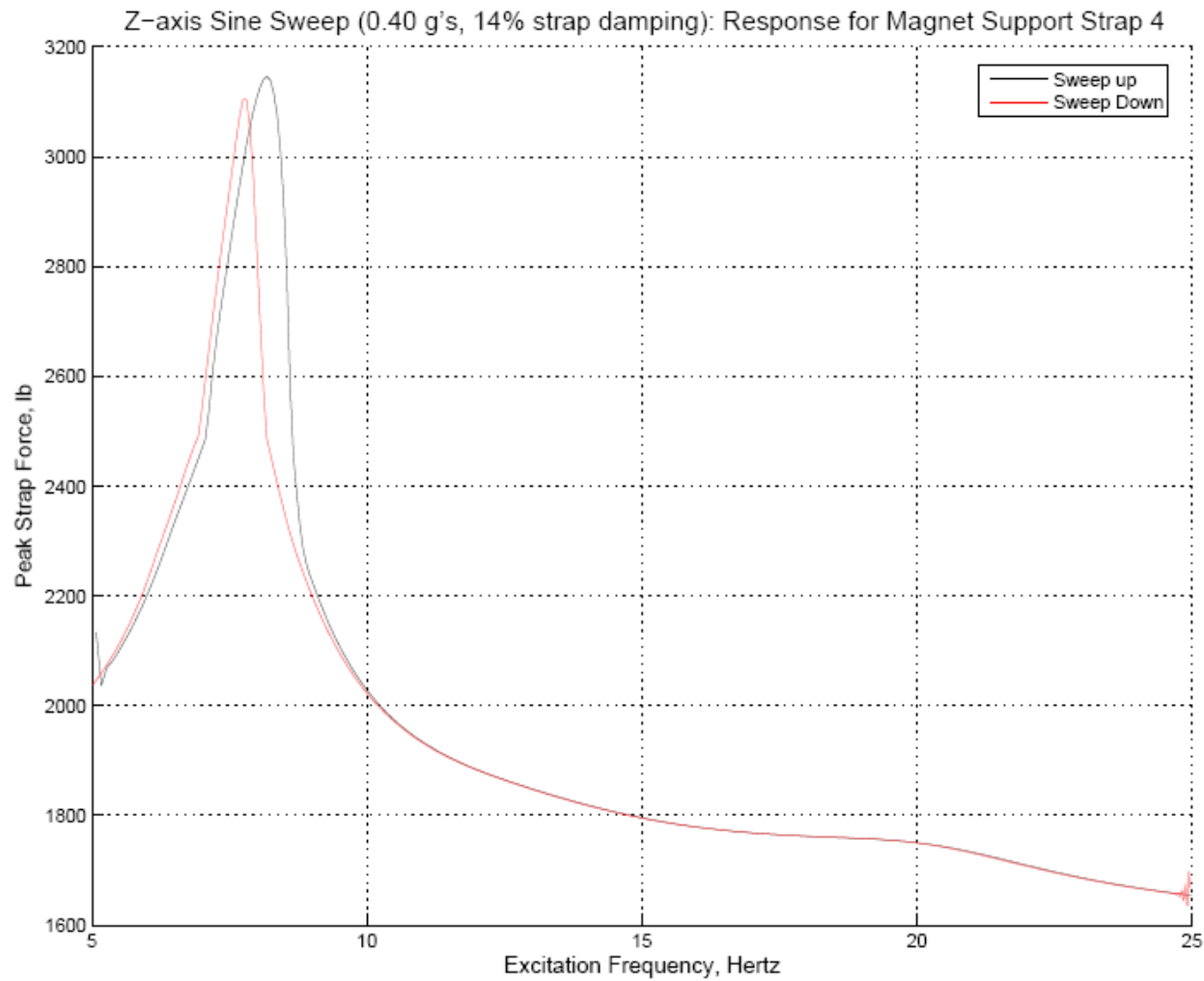


Figure 9-224 Strap 4 frequency response envelope for z-axis 0.40 g excitation

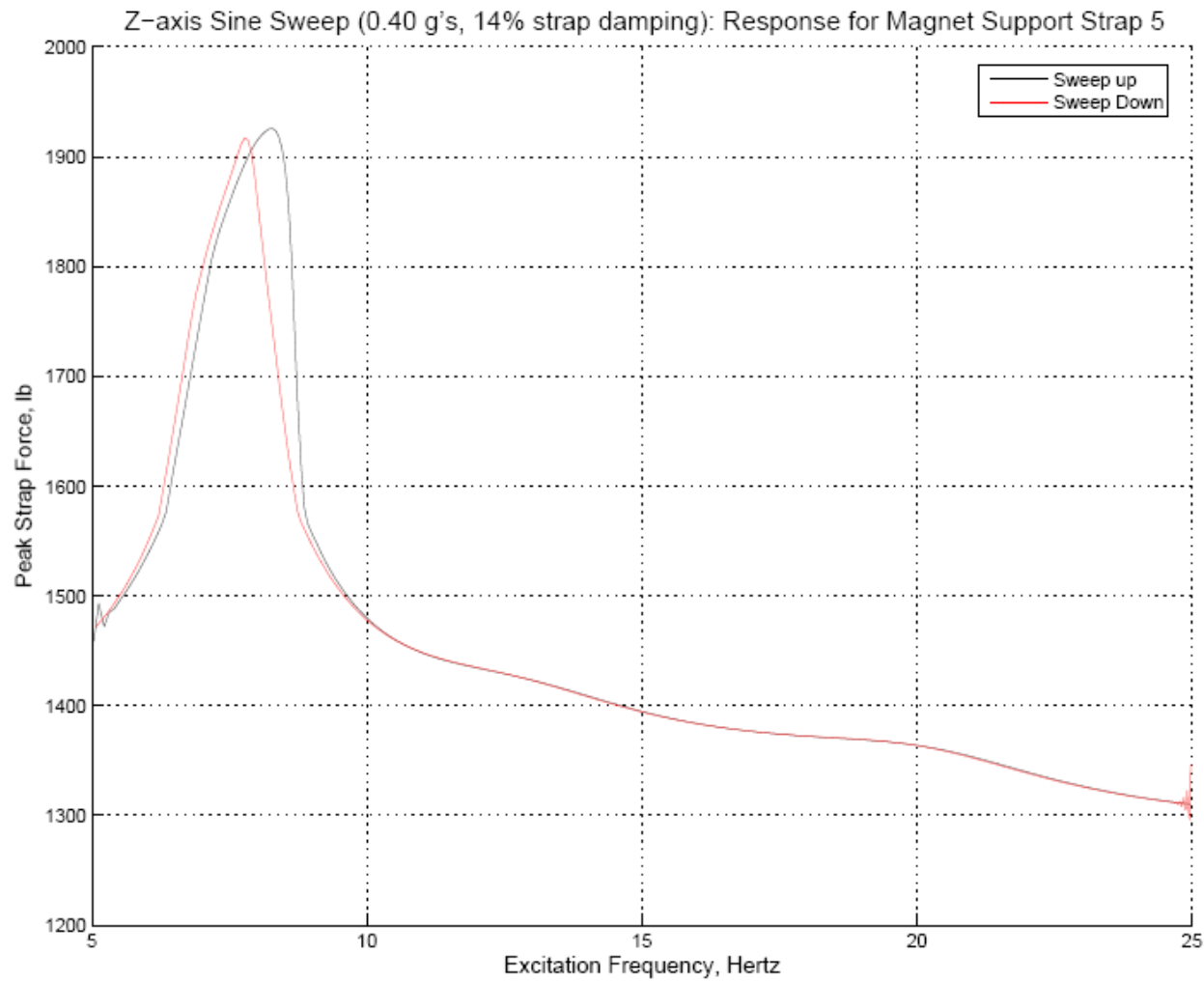


Figure 9-225 Strap 5 frequency response envelope for z-axis 0.40 g excitation

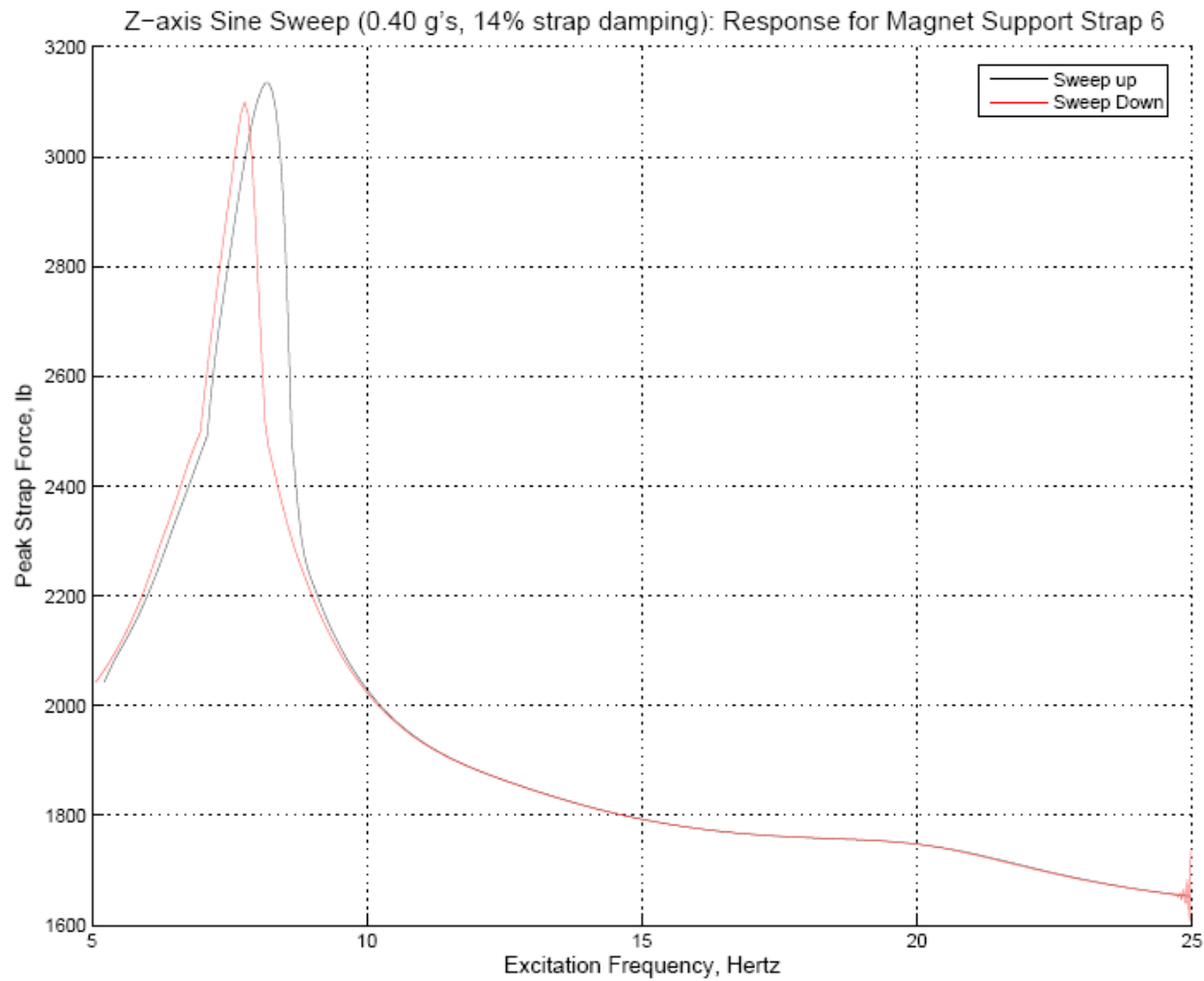


Figure 9-226 Strap 6 frequency response envelope for z-axis 0.40 g excitation

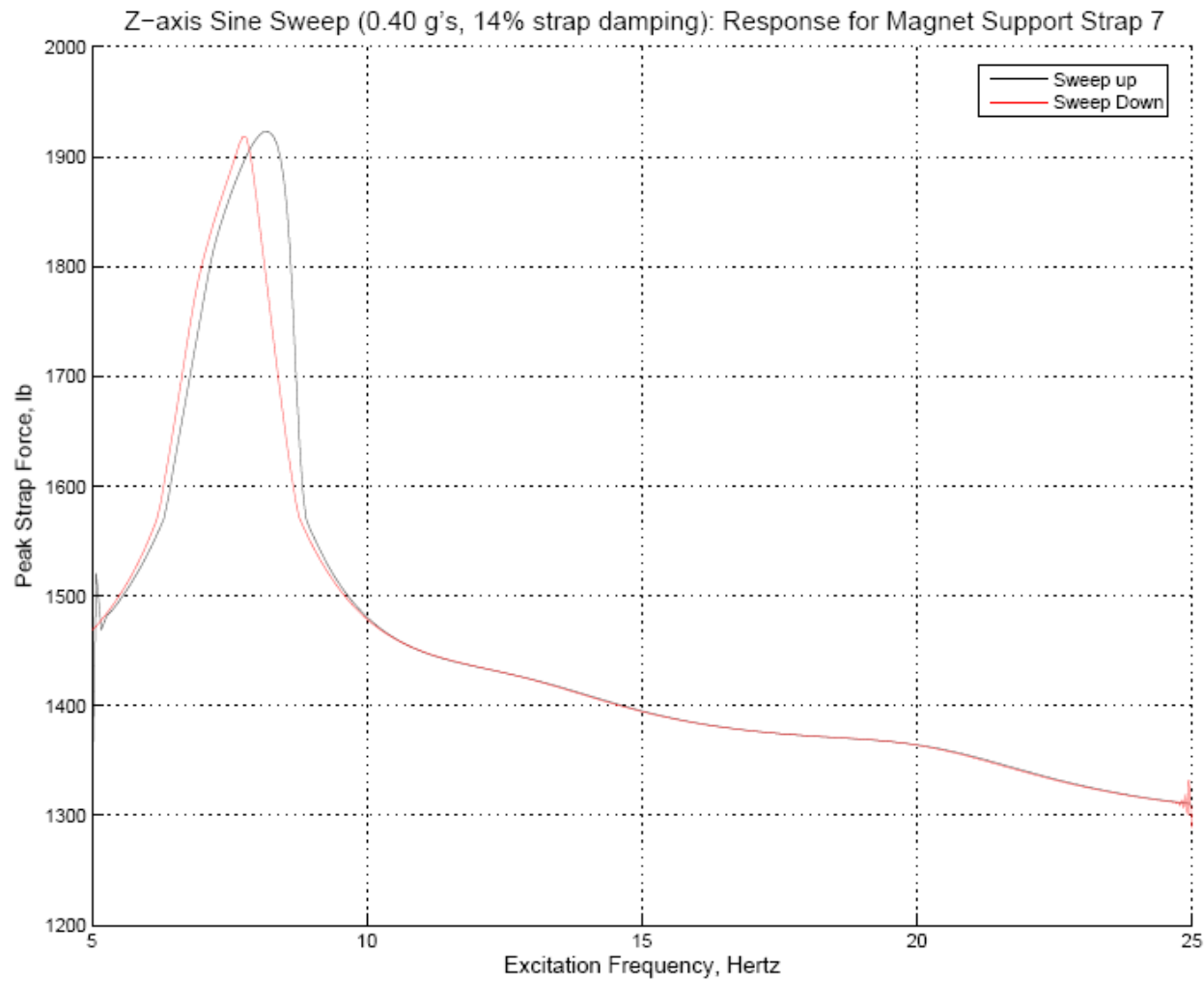


Figure 9-227 Strap 7 frequency response envelope for z-axis 0.40 g excitation

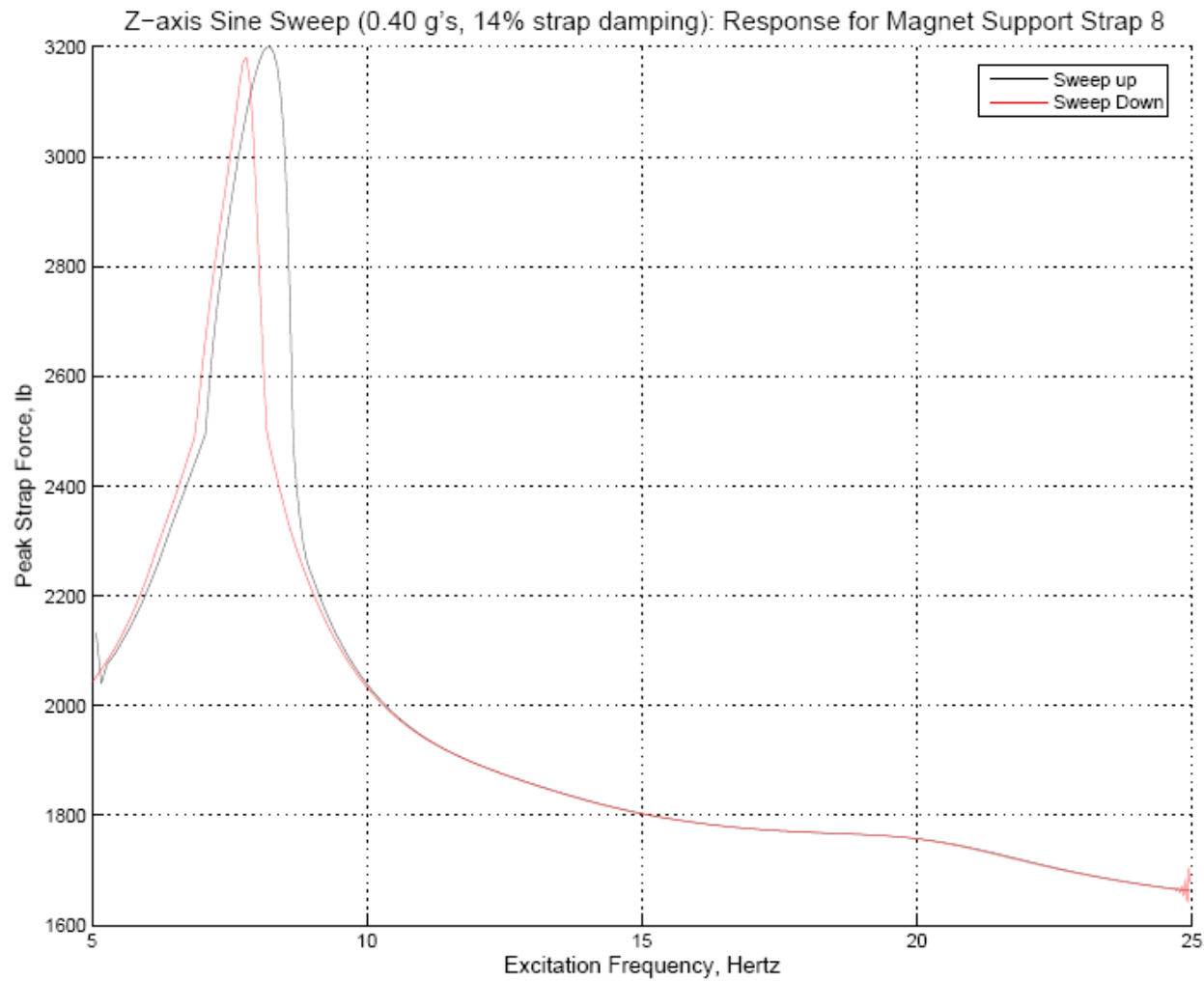


Figure 9-228 Strap 8 frequency response envelope for z-axis 0.40 g excitation

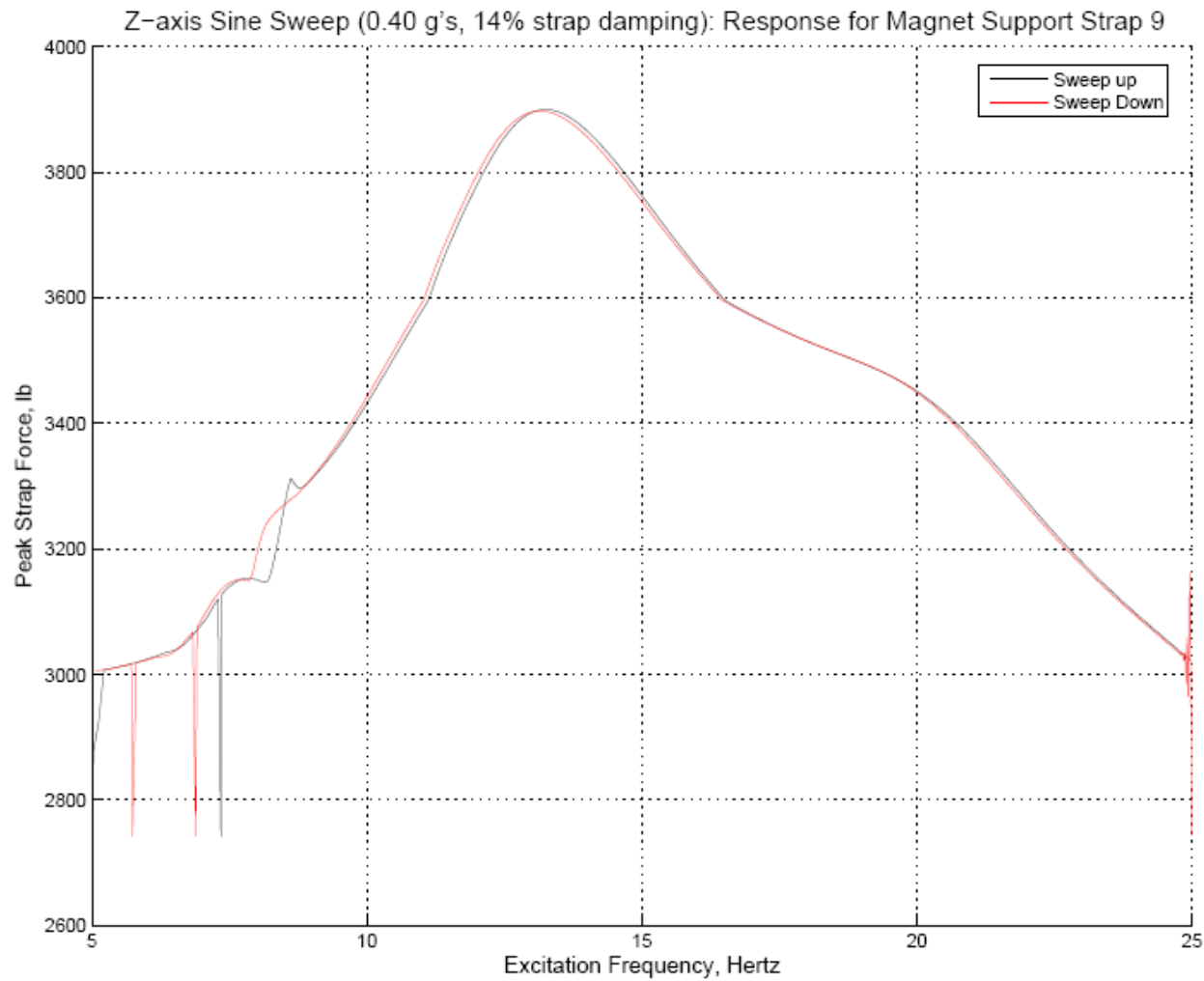
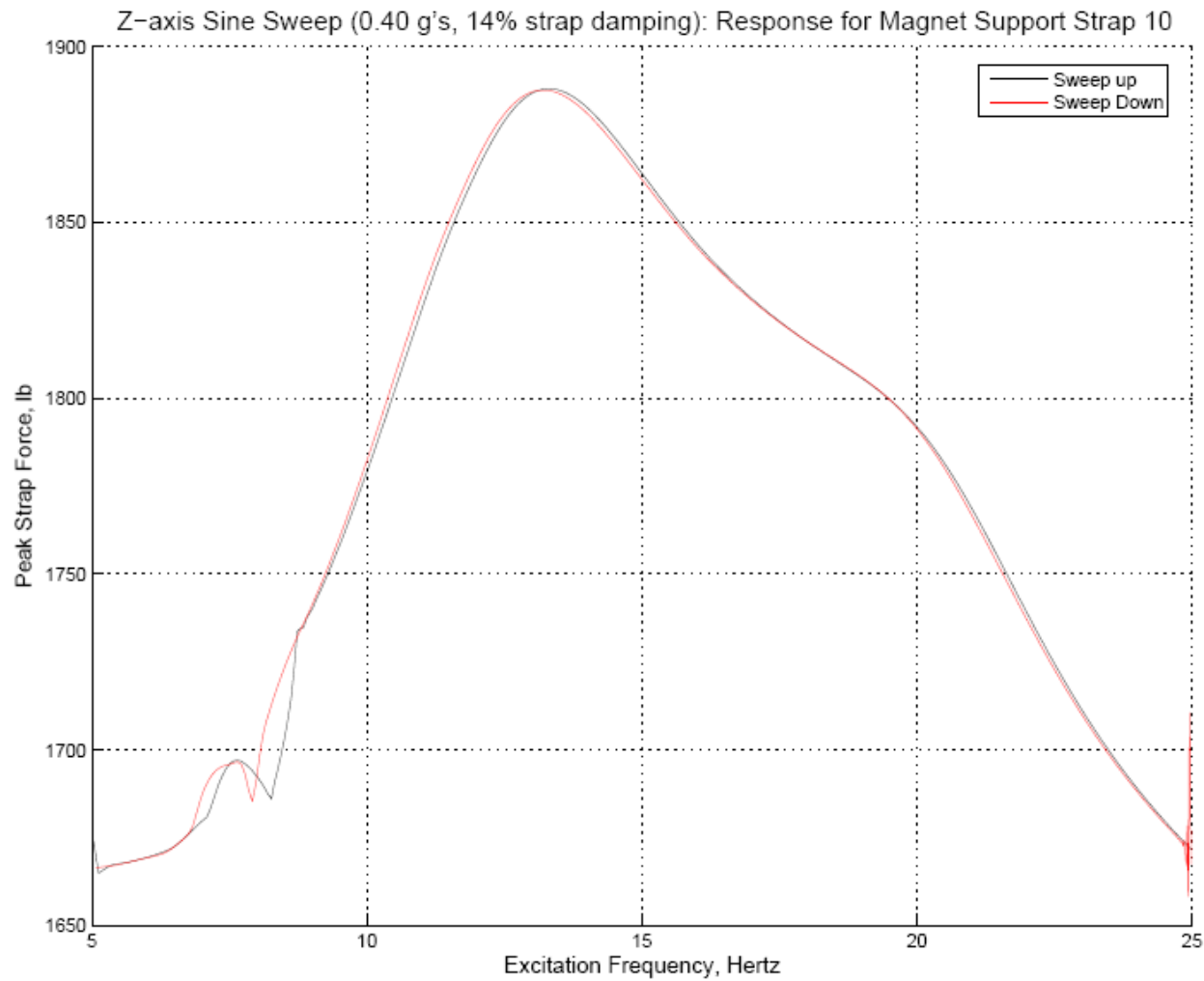


Figure 9-229 Strap 9 frequency response envelope for z-axis 0.40 g excitation





**Figure 9-230** Strap 10 frequency response envelope for z-axis 0.40 g excitation

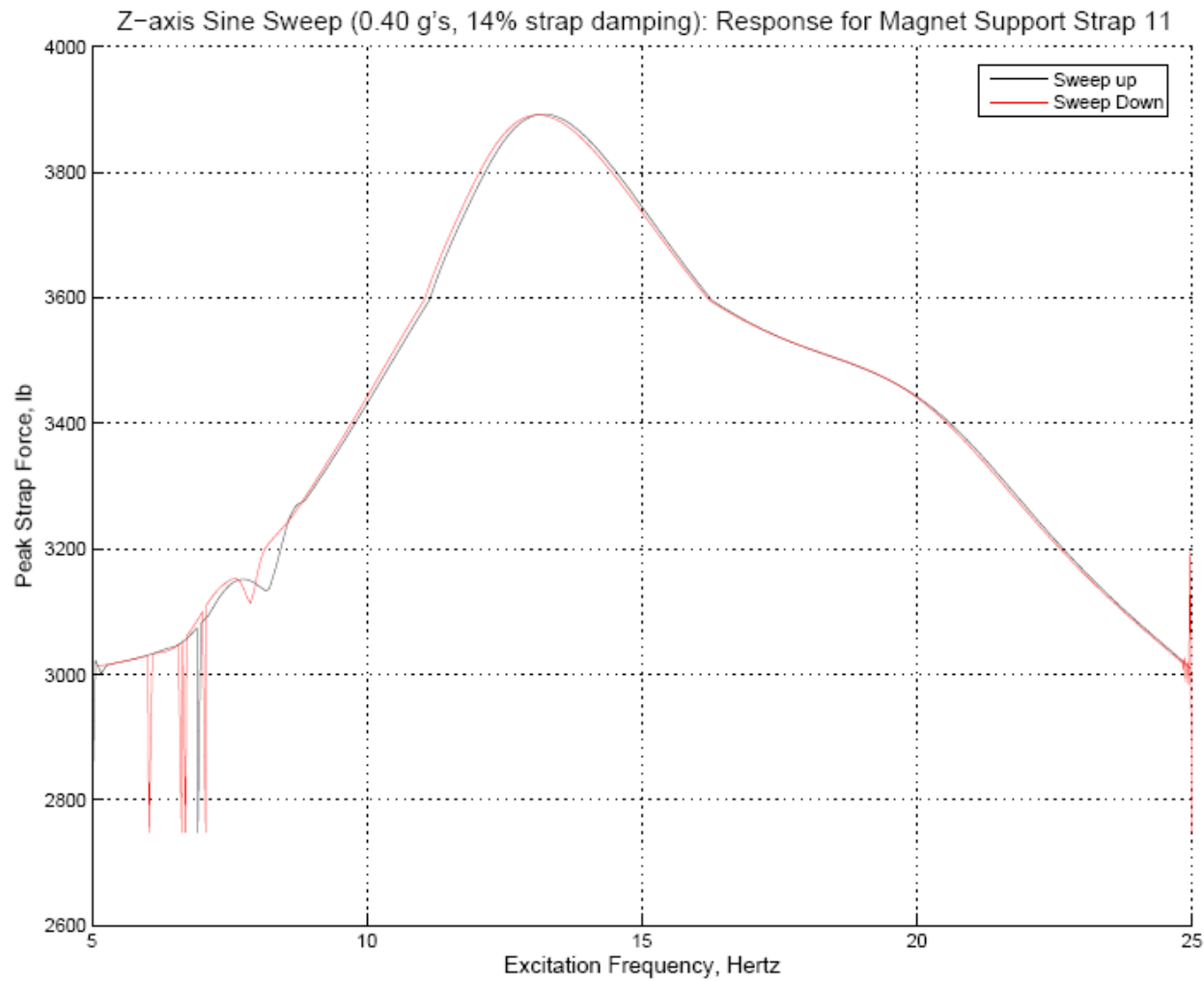


Figure 9-231 Strap 11 frequency response envelope for z-axis 0.40 g excitation

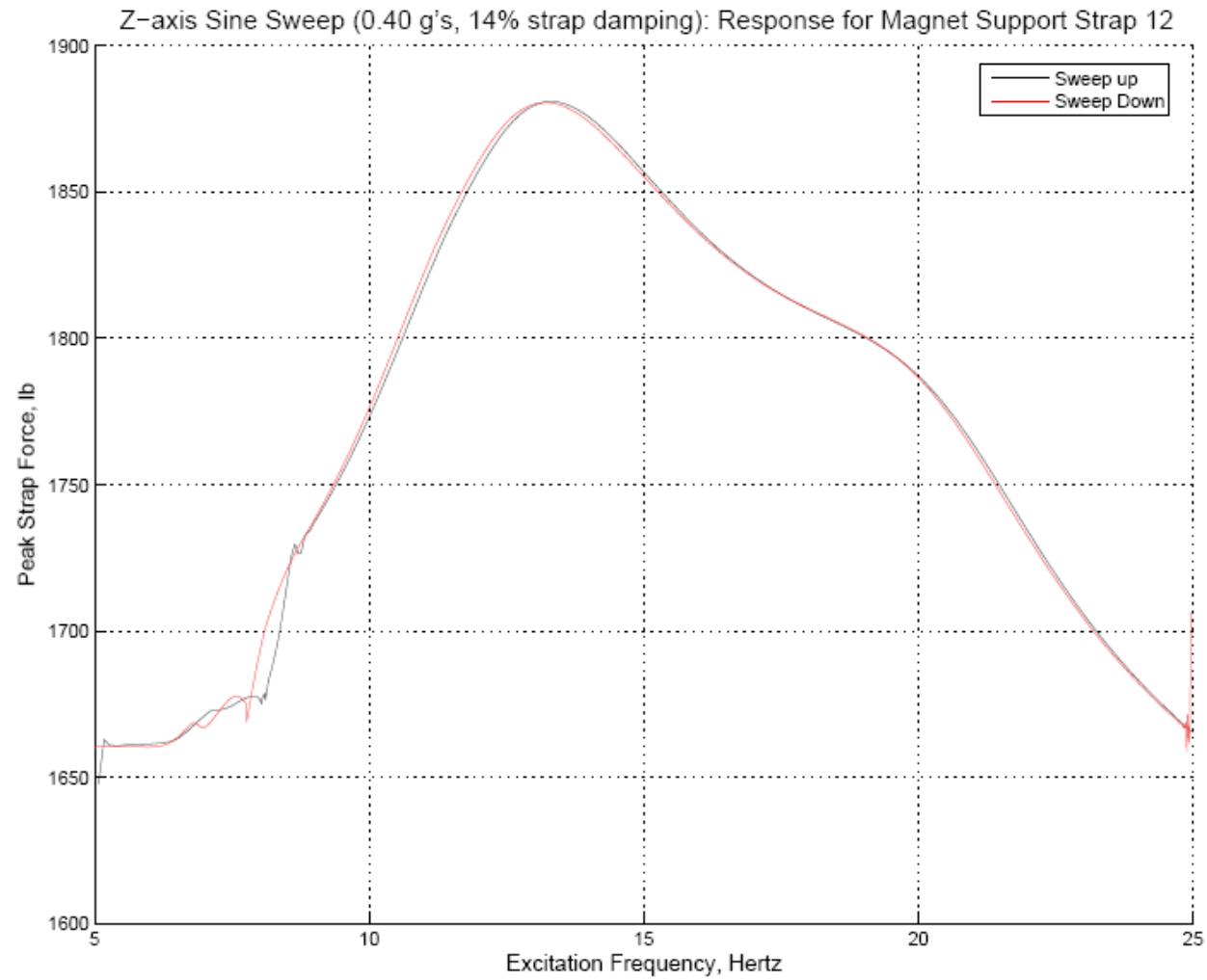


Figure 9-232 Strap 12 frequency response envelope for z-axis 0.40 g excitation

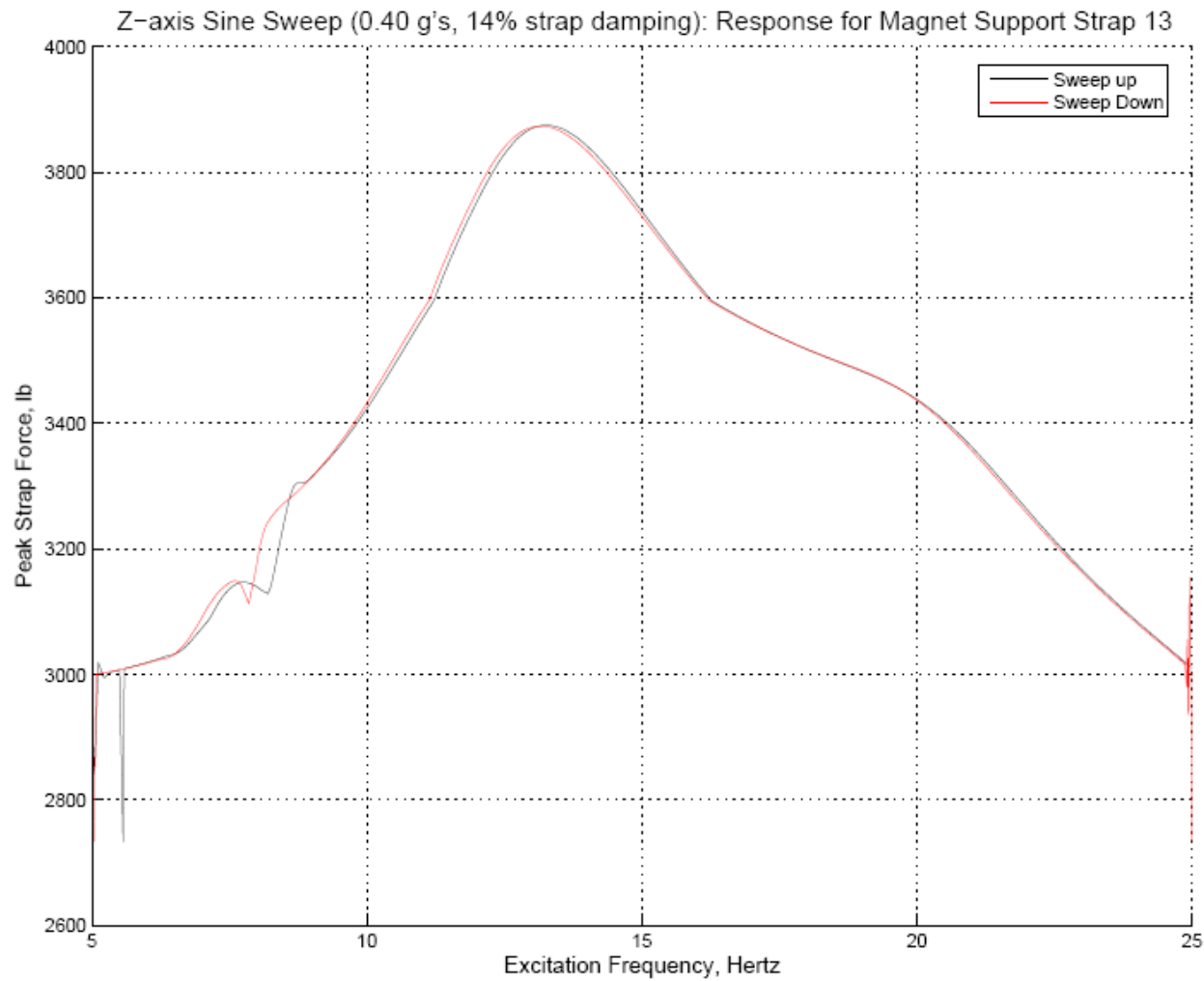


Figure 9-233 Strap 13 frequency response envelope for z-axis 0.40 g excitation

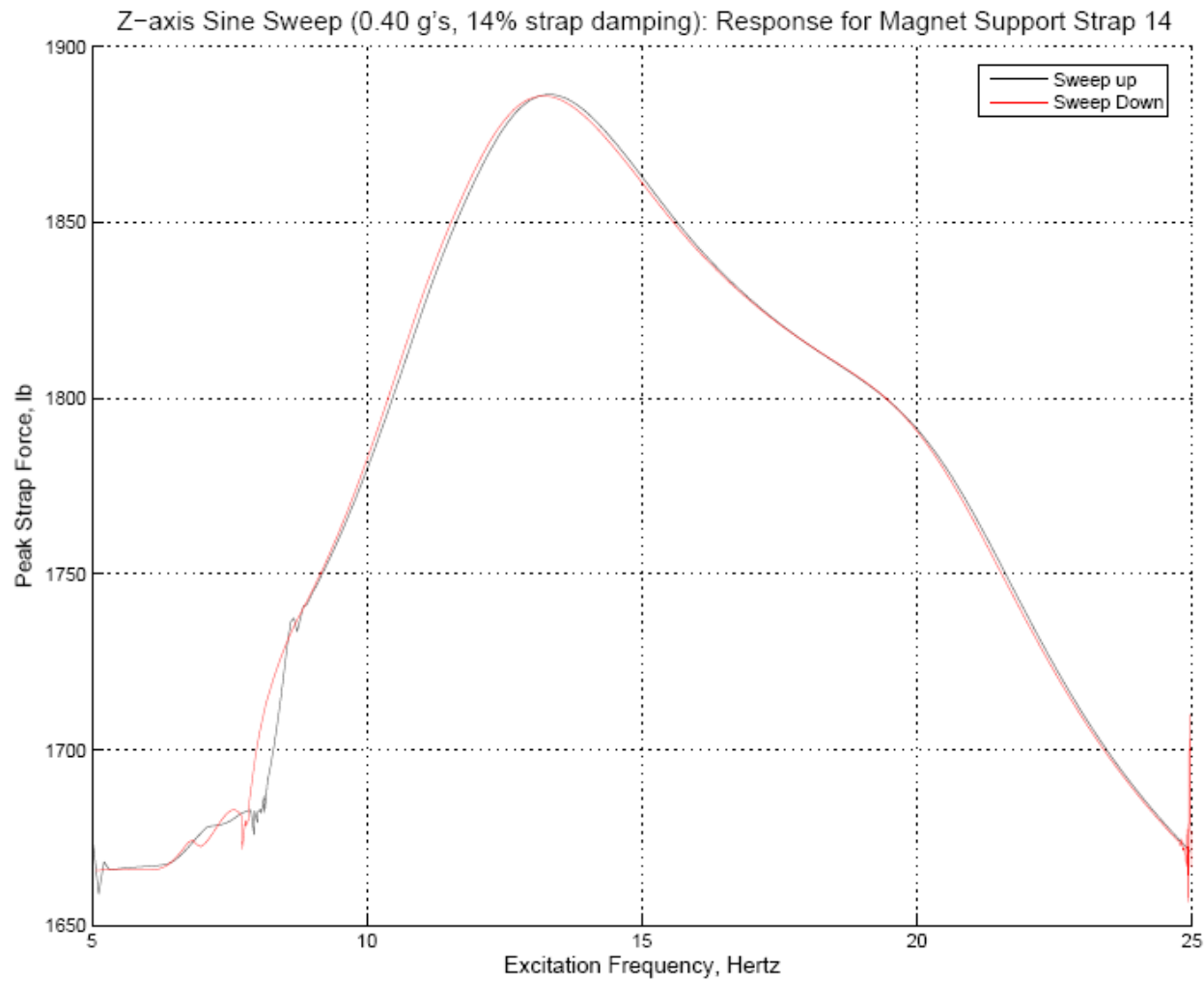


Figure 9-234 Strap 14 frequency response envelope for z-axis 0.40 g excitation

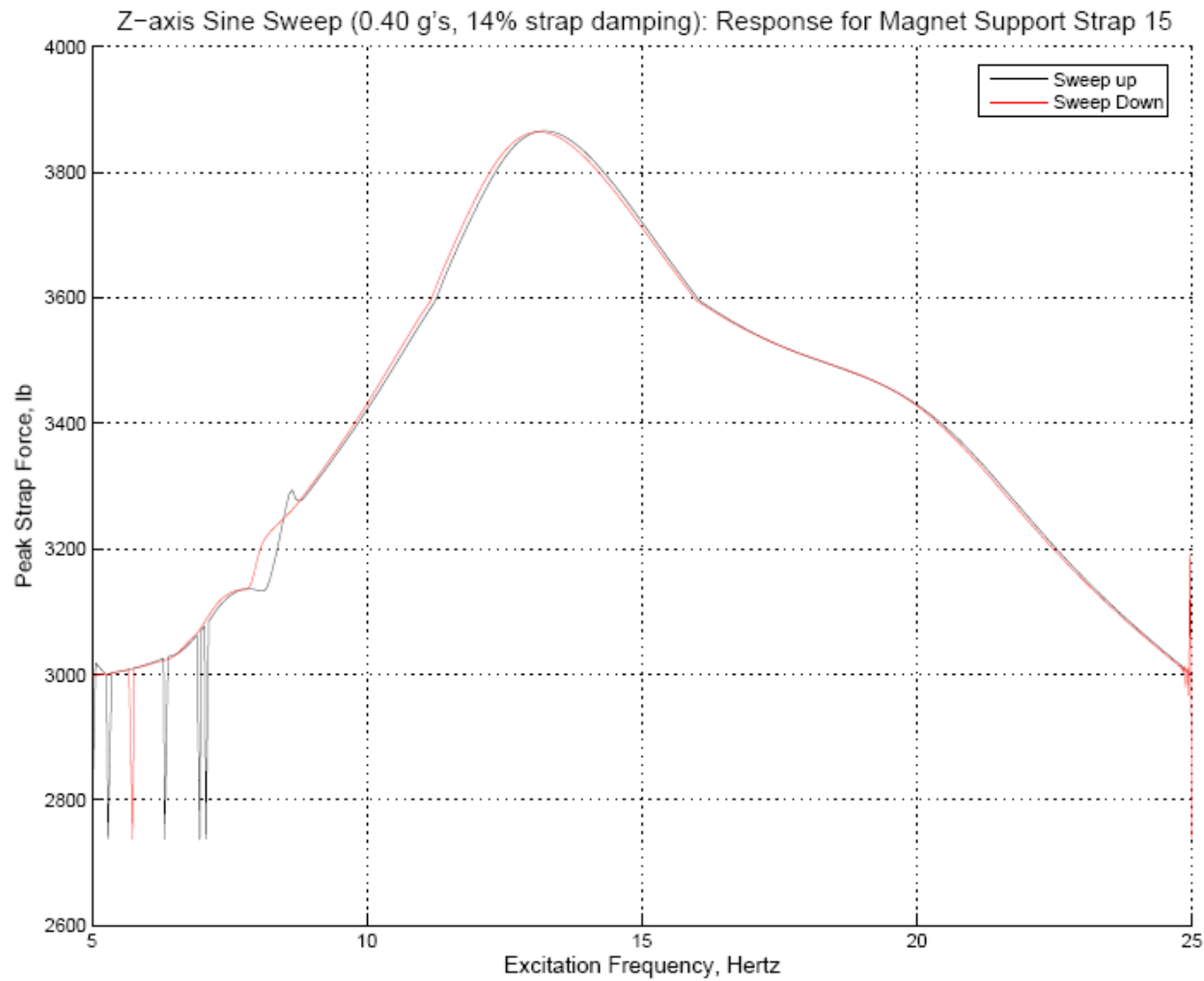


Figure 9-235 Strap 15 frequency response envelope for z-axis 0.40 g excitation

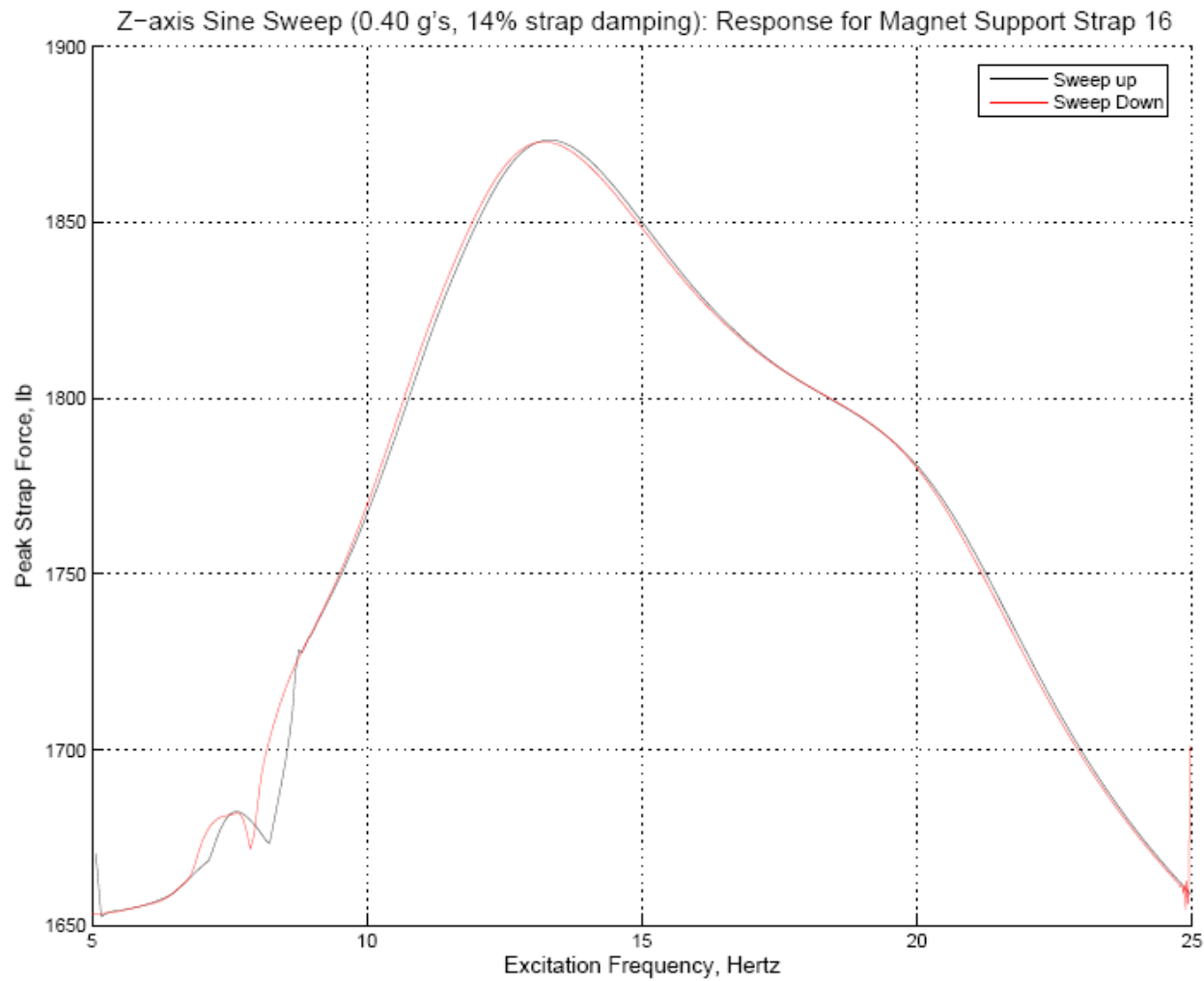


Figure 9-236 Strap 16 frequency response envelope for z-axis 0.40 g excitation

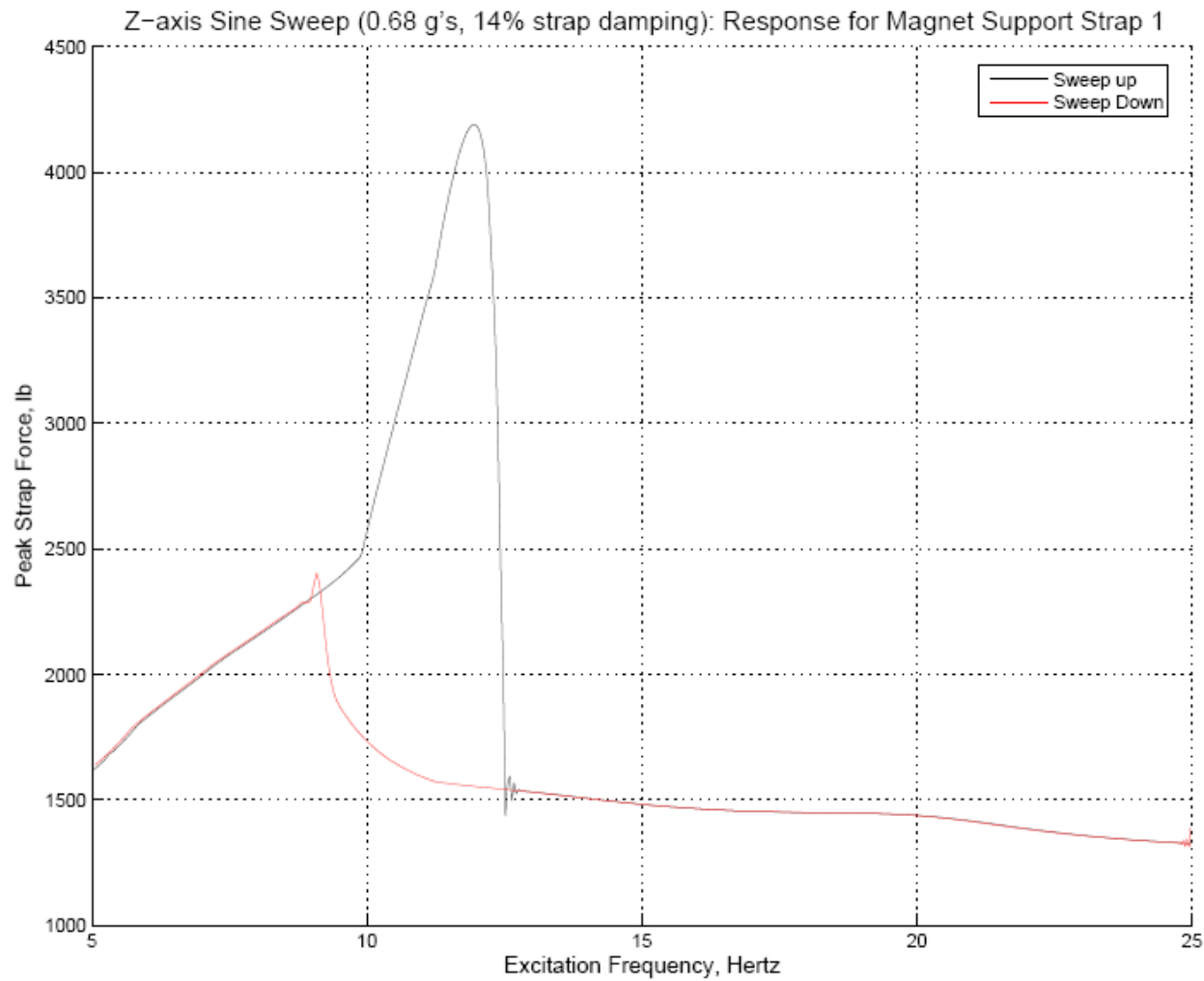
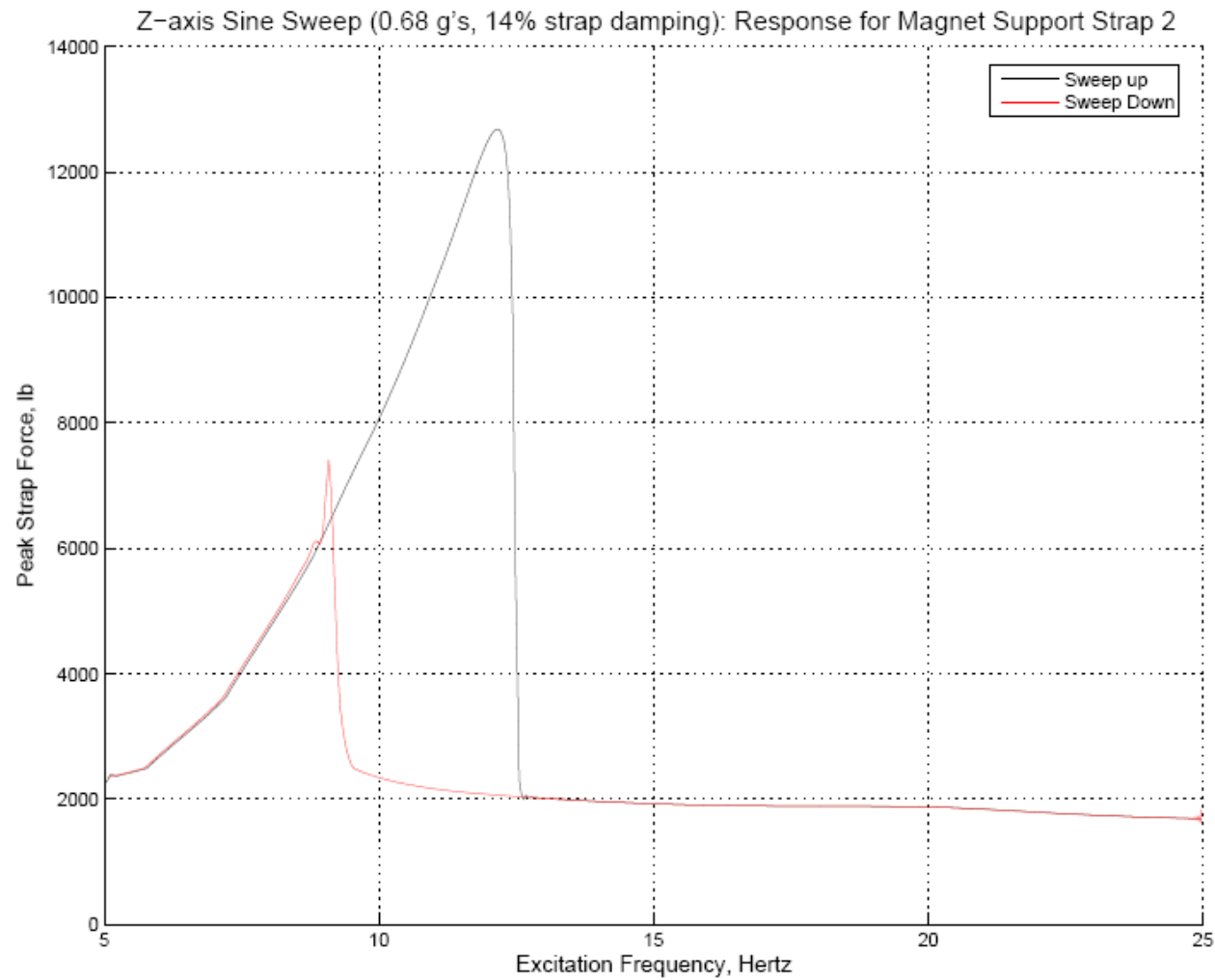


Figure 9-237 Strap 1 frequency response envelope for z-axis 0.68 g excitation





**Figure 9-238** Strap 2 frequency response envelope for z-axis 0.68 g excitation

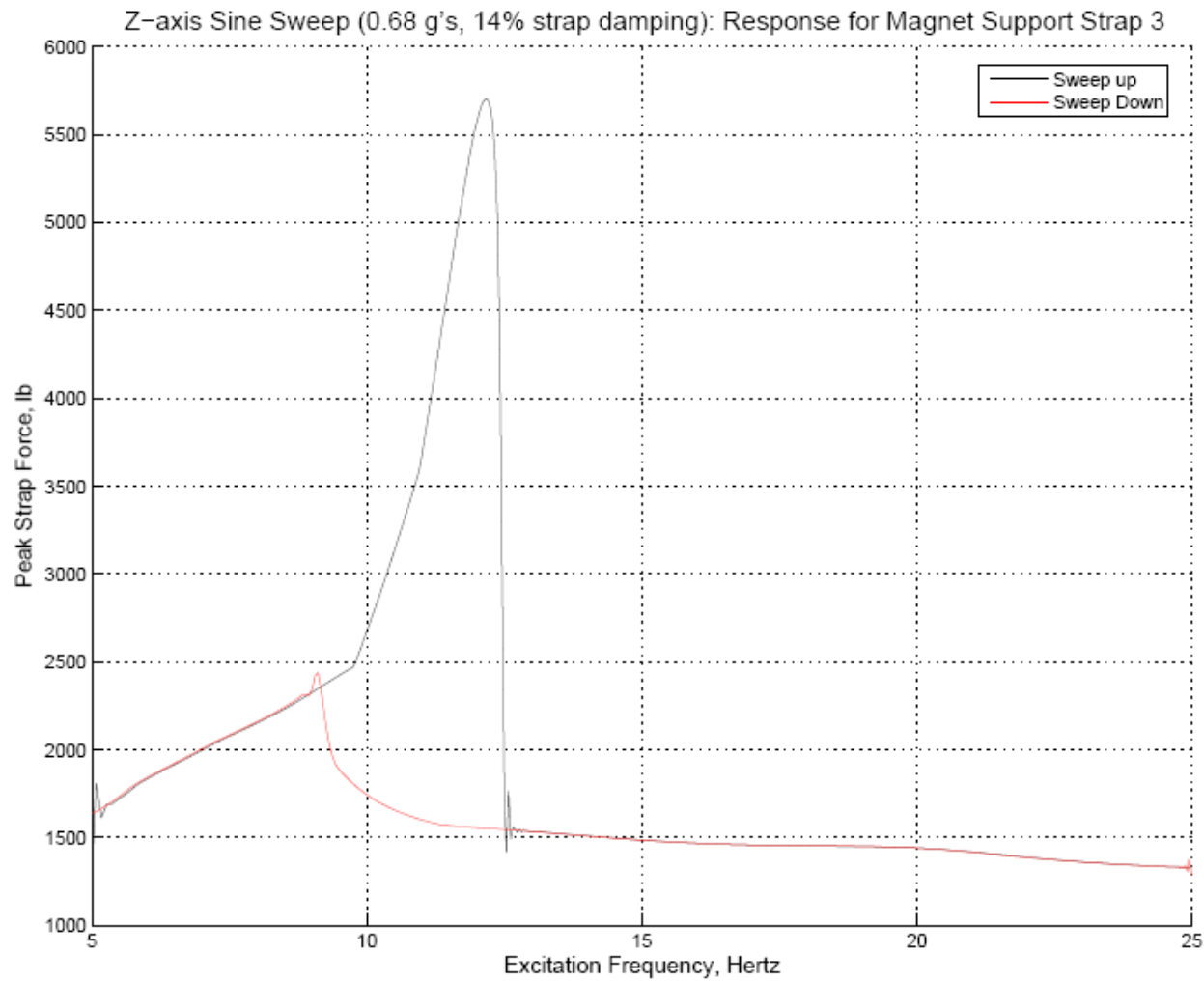
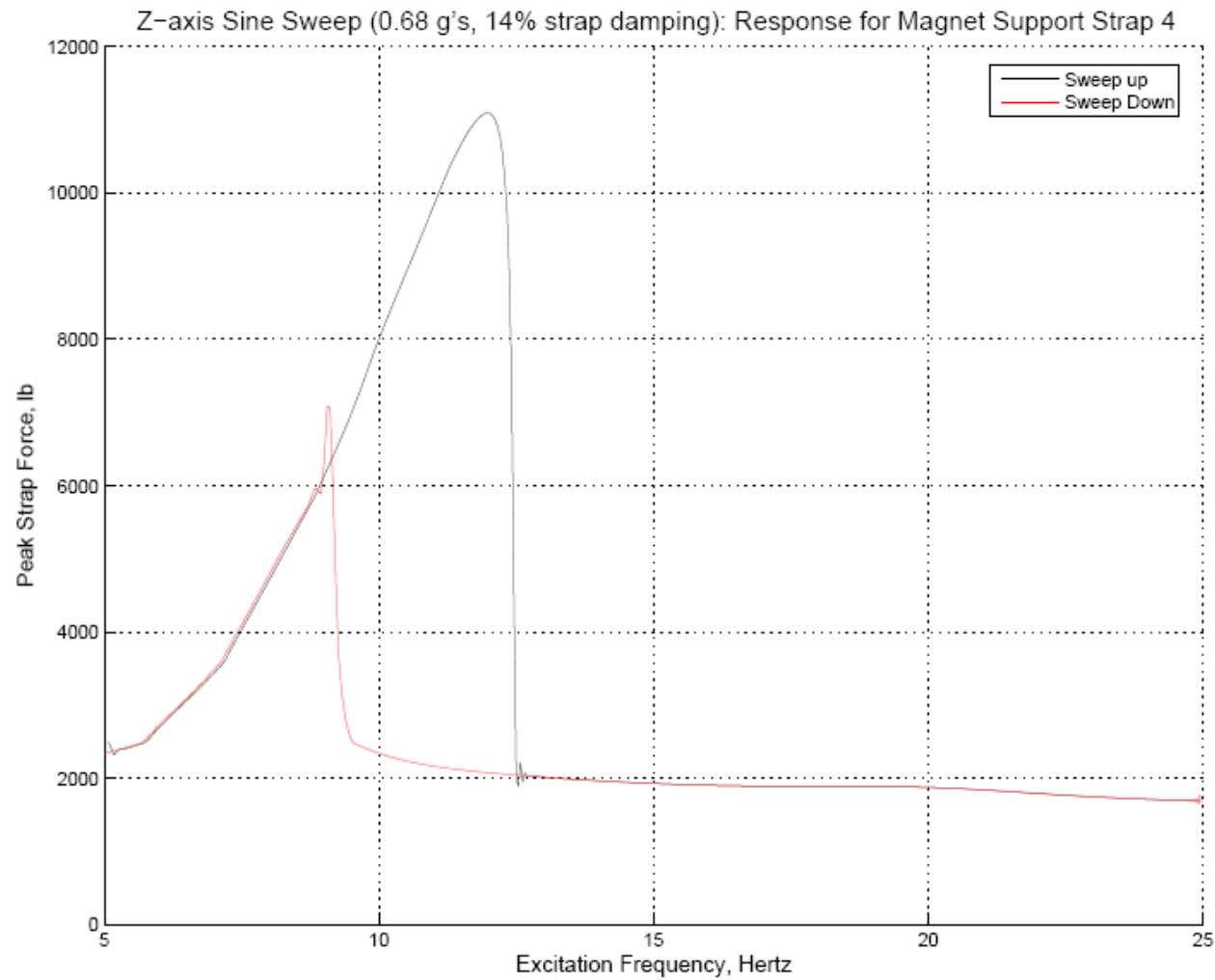
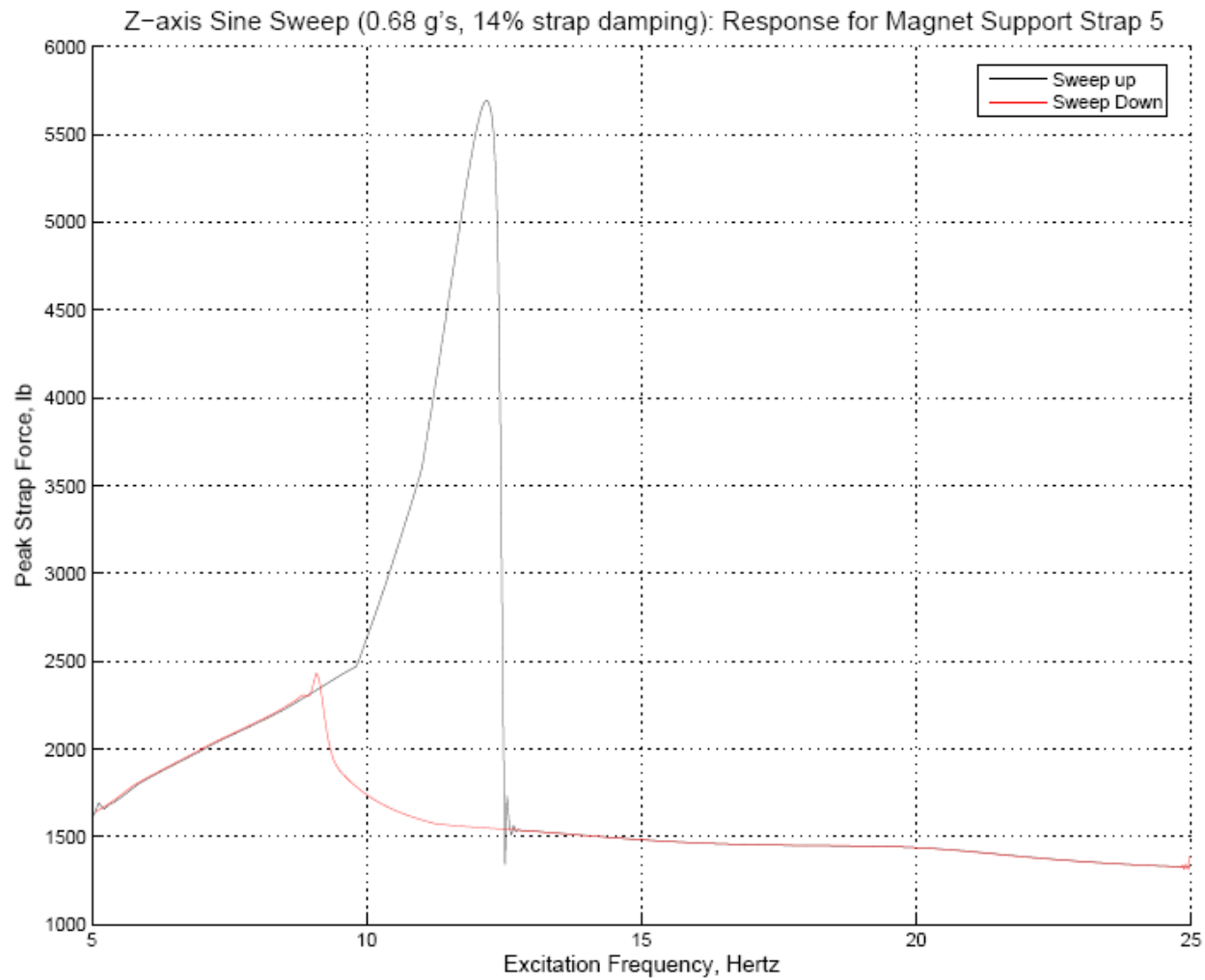


Figure 9-239 Strap 3 frequency response envelope for z-axis 0.68 g excitation



**Figure 9-240** Strap 4 frequency response envelope for z-axis 0.68 g excitation



**Figure 9-241 Strap 5 frequency response envelope for z-axis 0.68 g excitation**

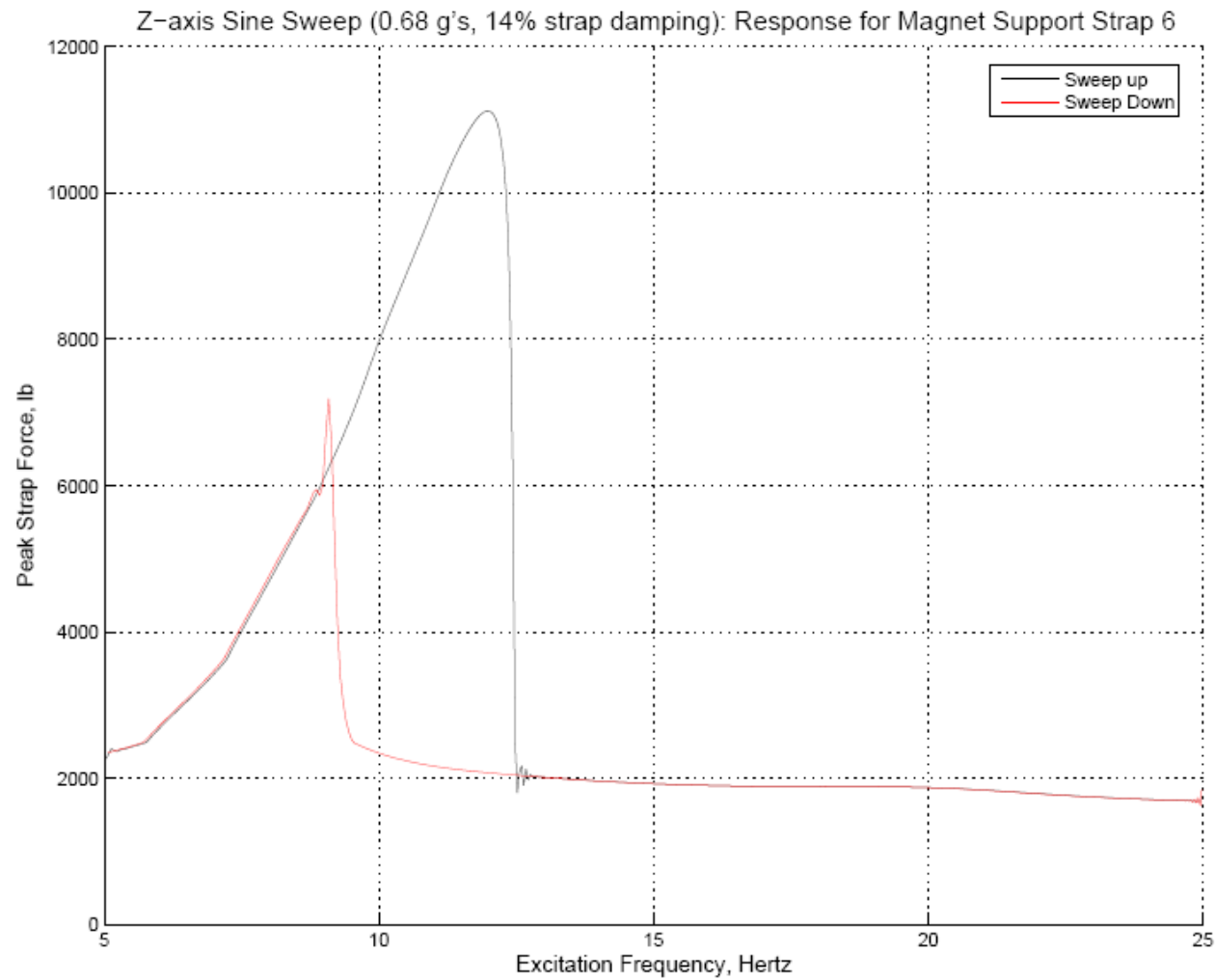


Figure 9-242 Strap 6 frequency response envelope for z-axis 0.68 g excitation

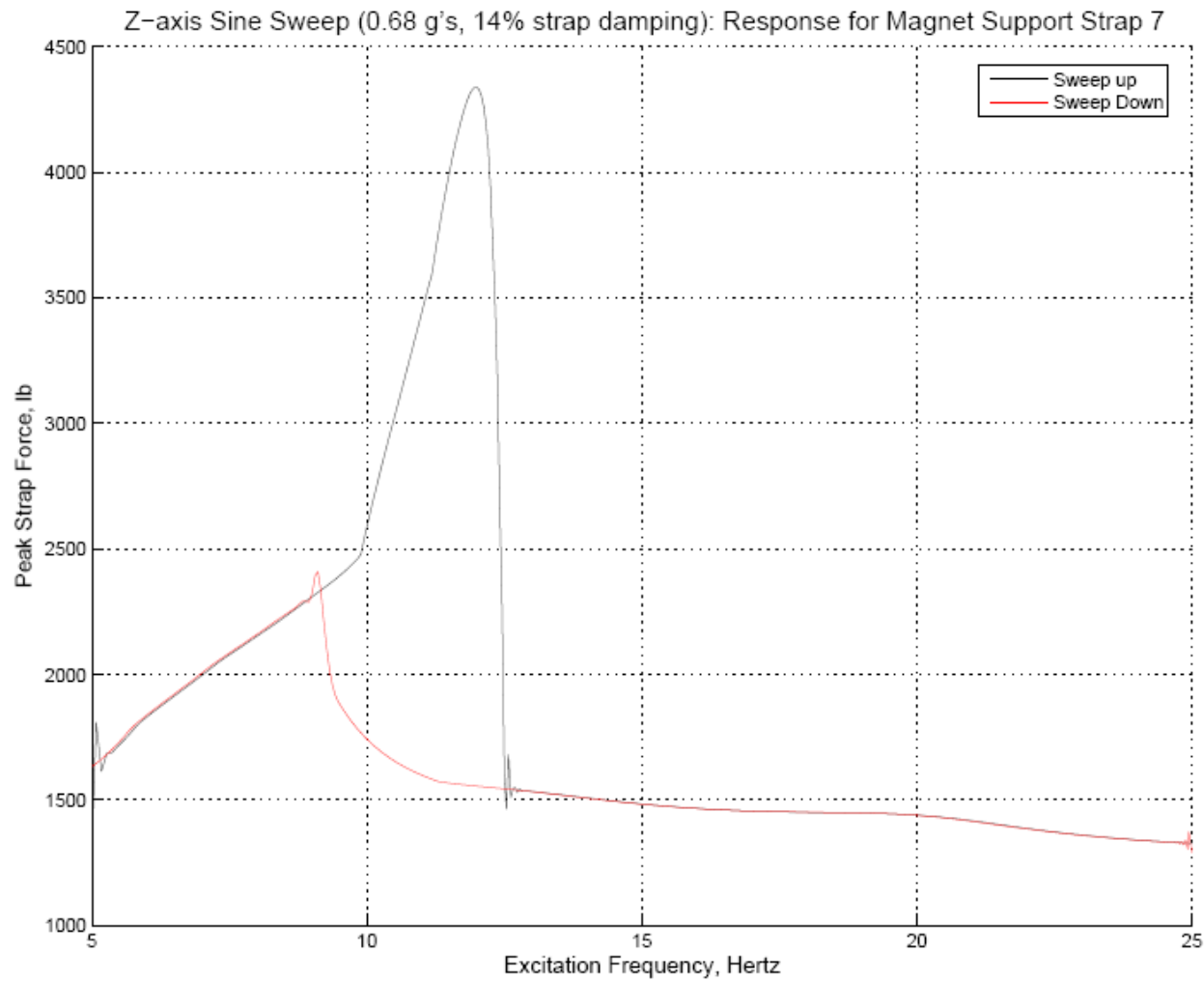


Figure 9-243 Strap 7 frequency response envelope for z-axis 0.68 g excitation

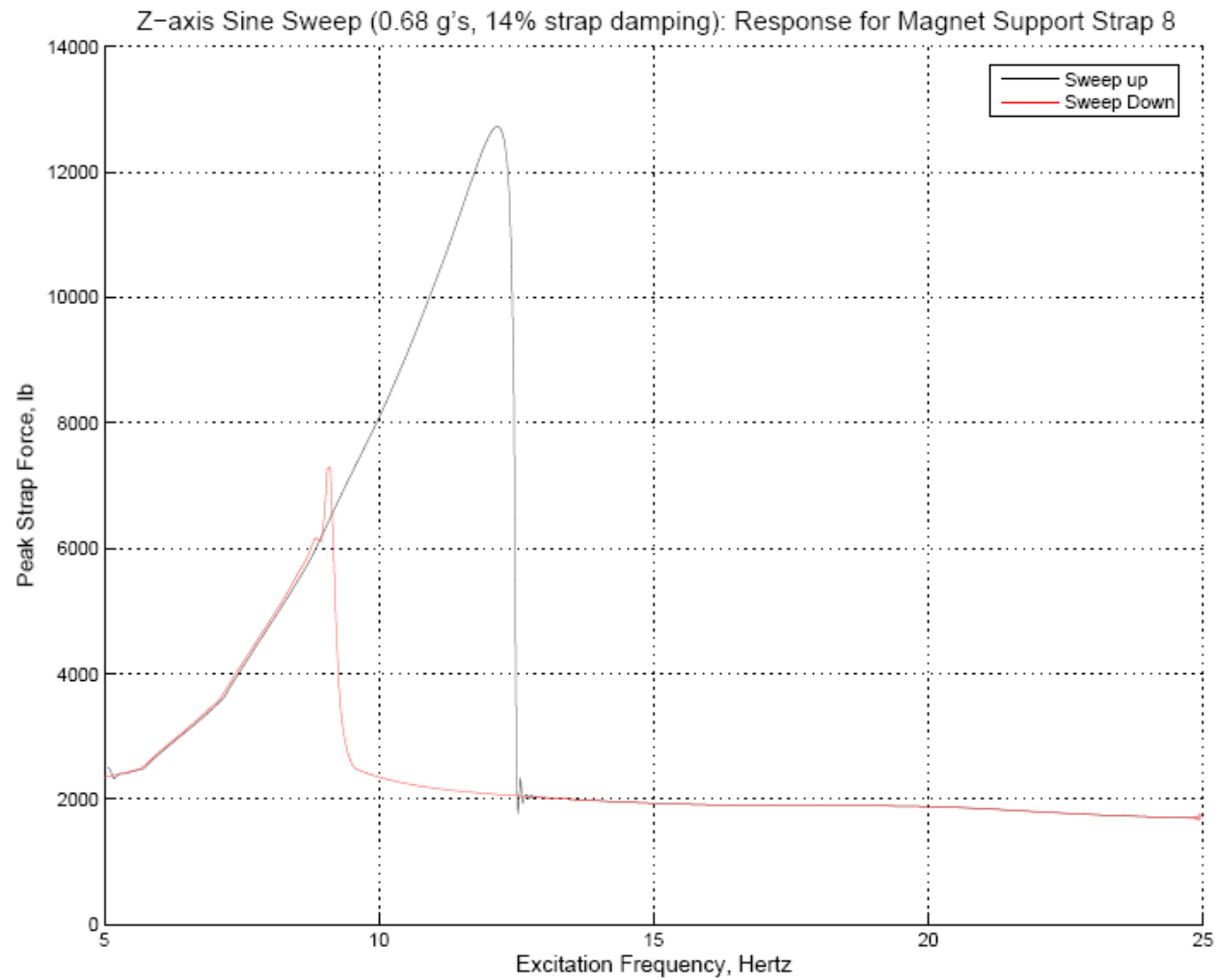


Figure 9-244 Strap 8 frequency response envelope for z-axis 0.68 g excitation

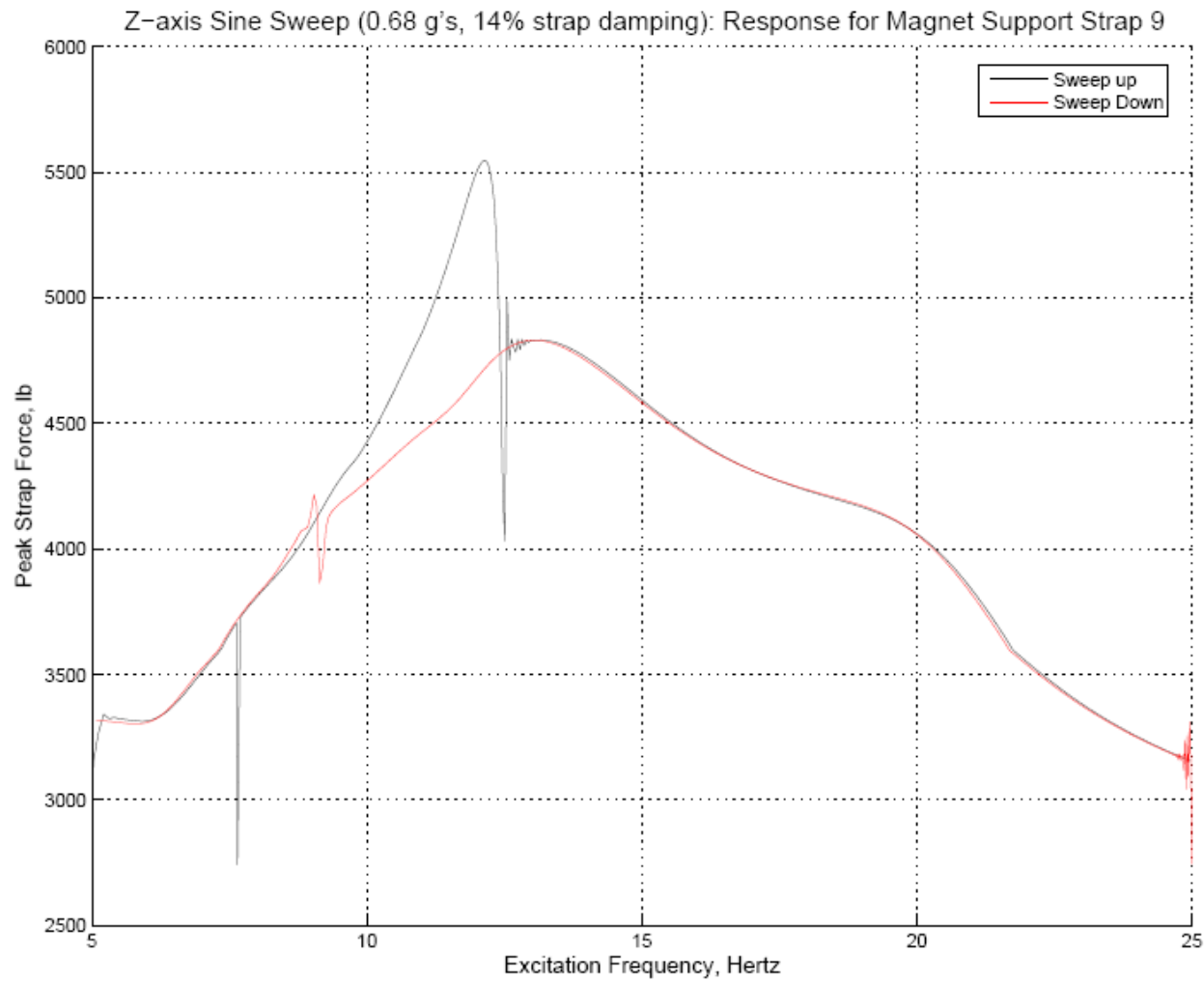


Figure 9-245 Strap 9 frequency response envelope for z-axis 0.68 g excitation



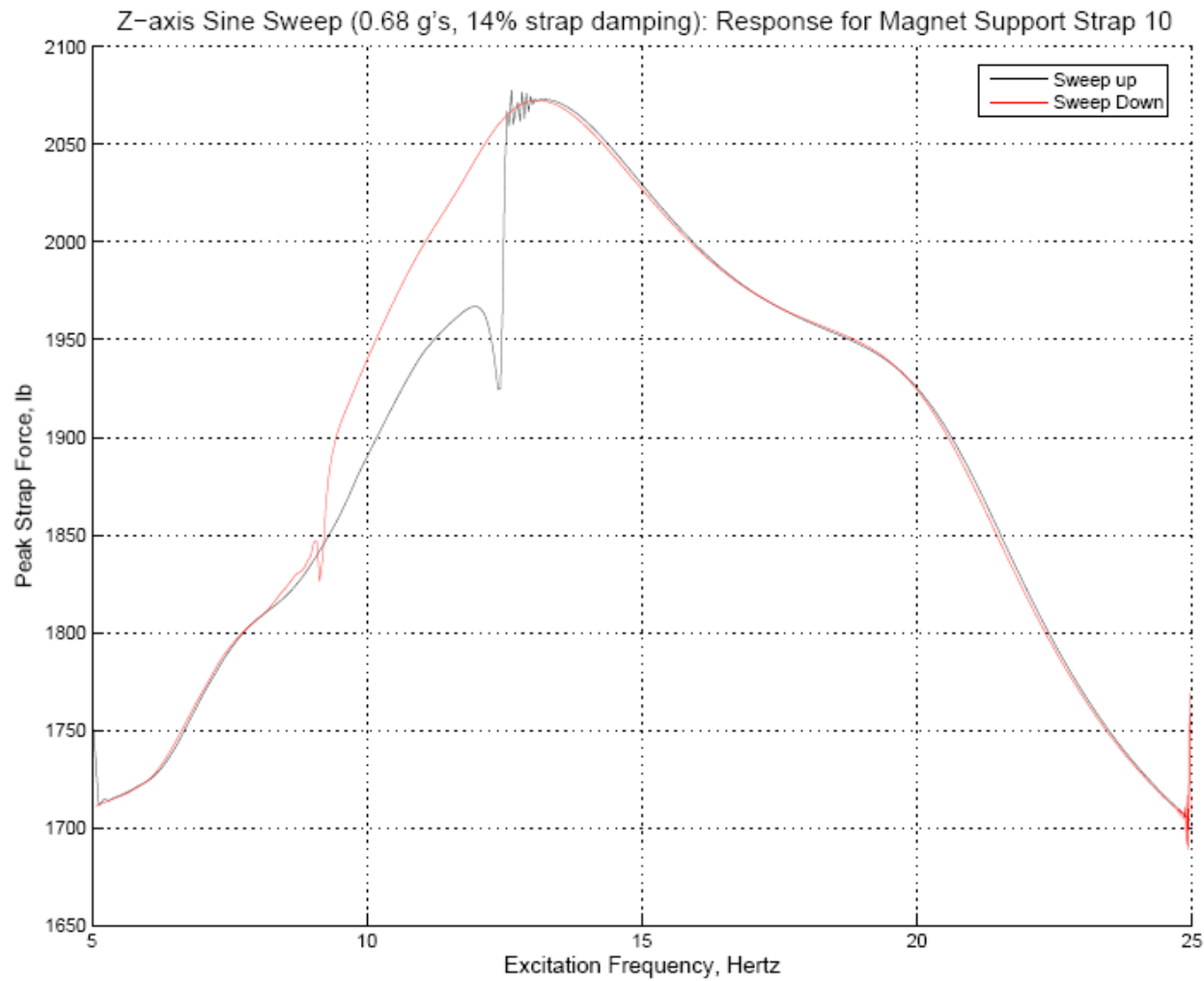


Figure 9-246 Strap 10 frequency response envelope for z-axis 0.68 g excitation

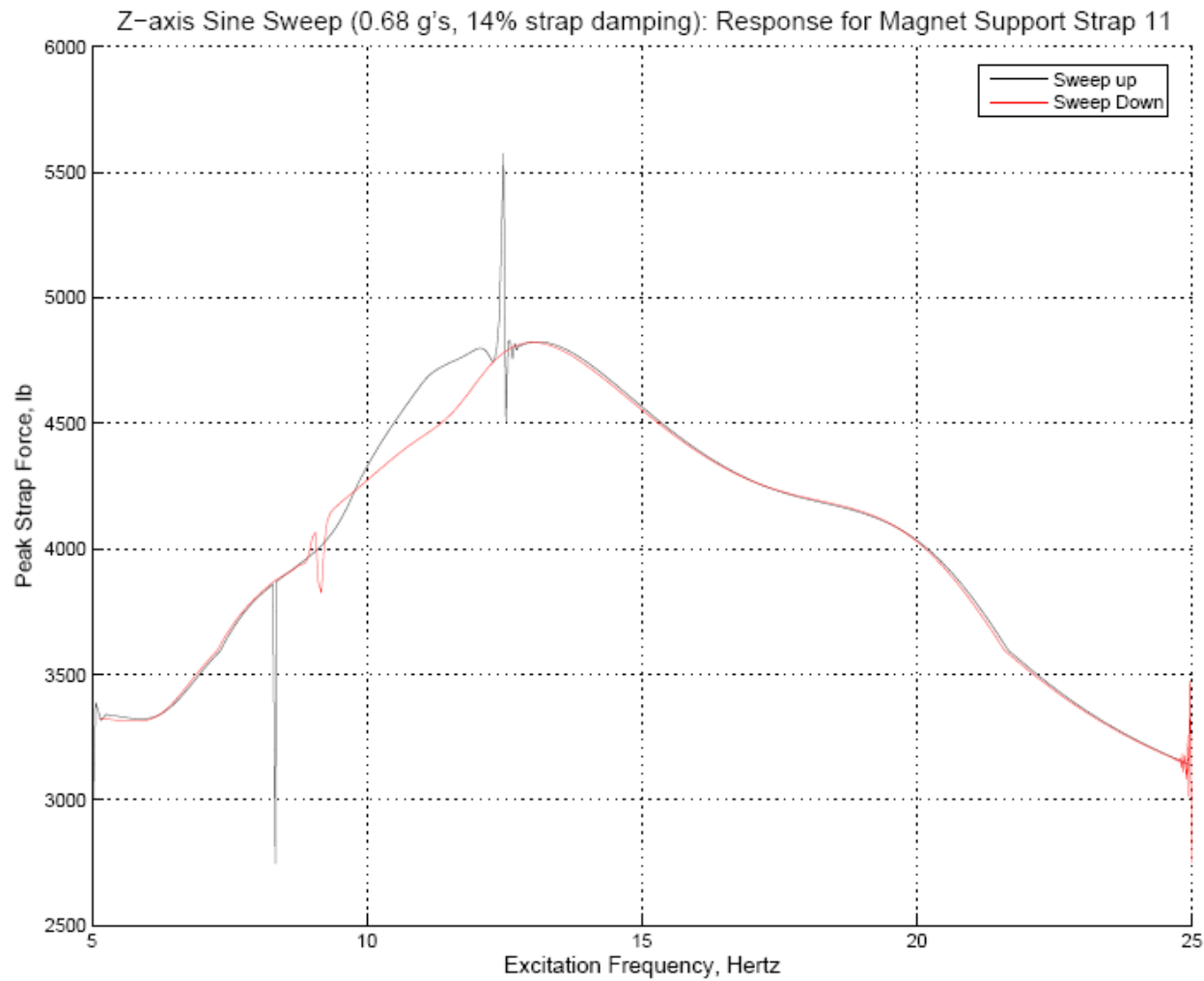


Figure 9-247 Strap 11 frequency response envelope for z-axis 0.68 g excitation

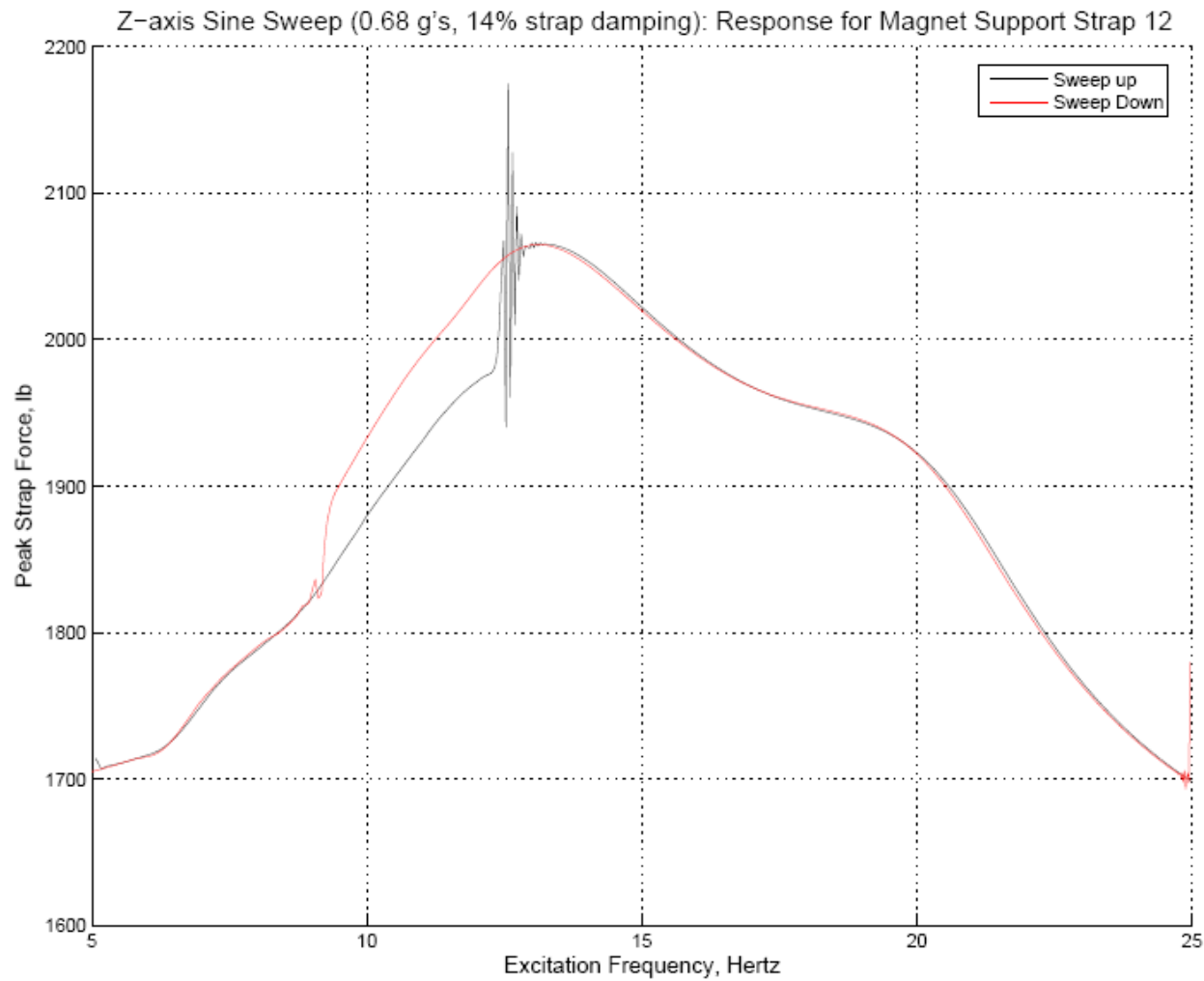


Figure 9-248 Strap 12 frequency response envelope for z-axis 0.68 g excitation

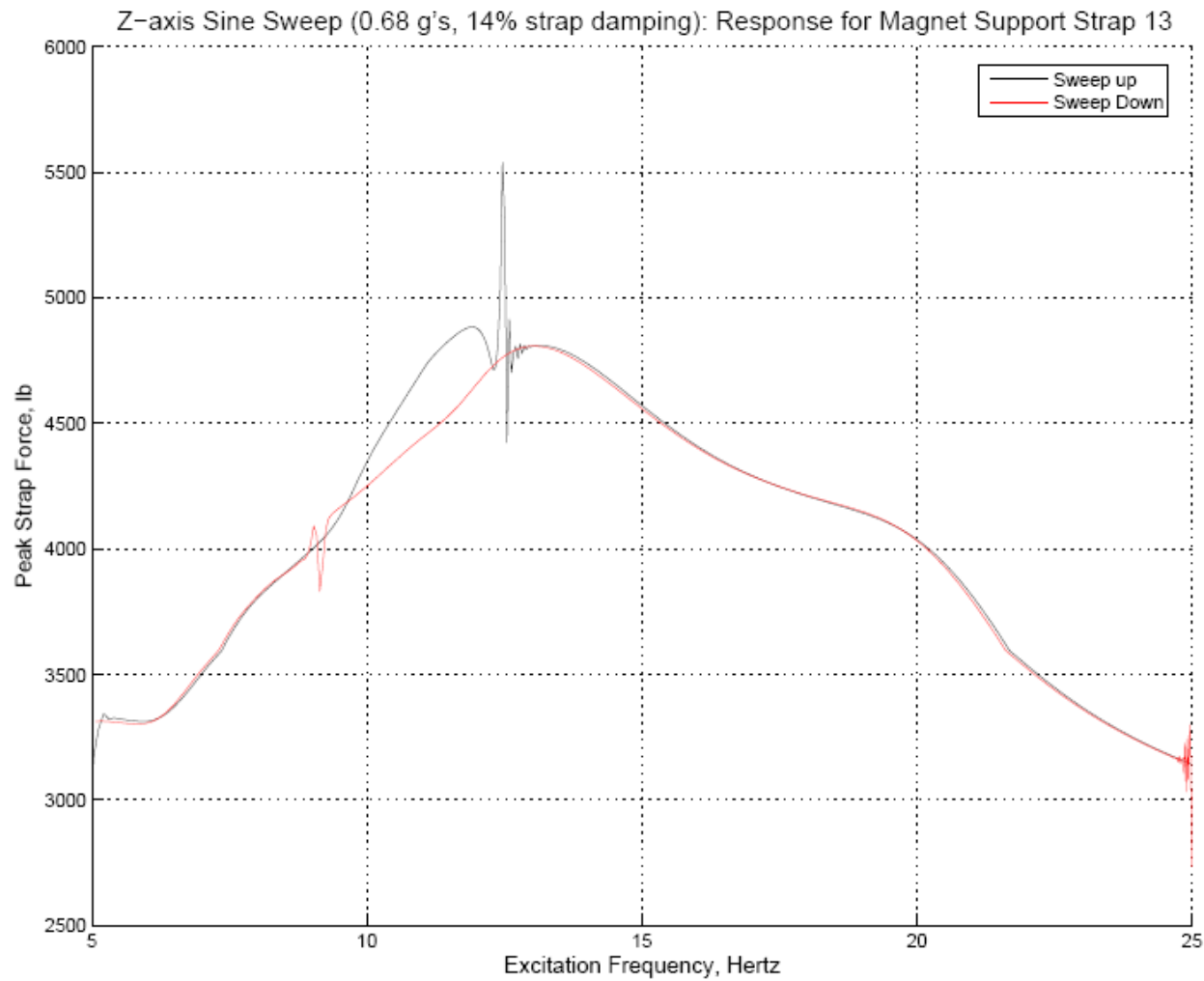


Figure 9-249 Strap 13 frequency response envelope for z-axis 0.68 g excitation

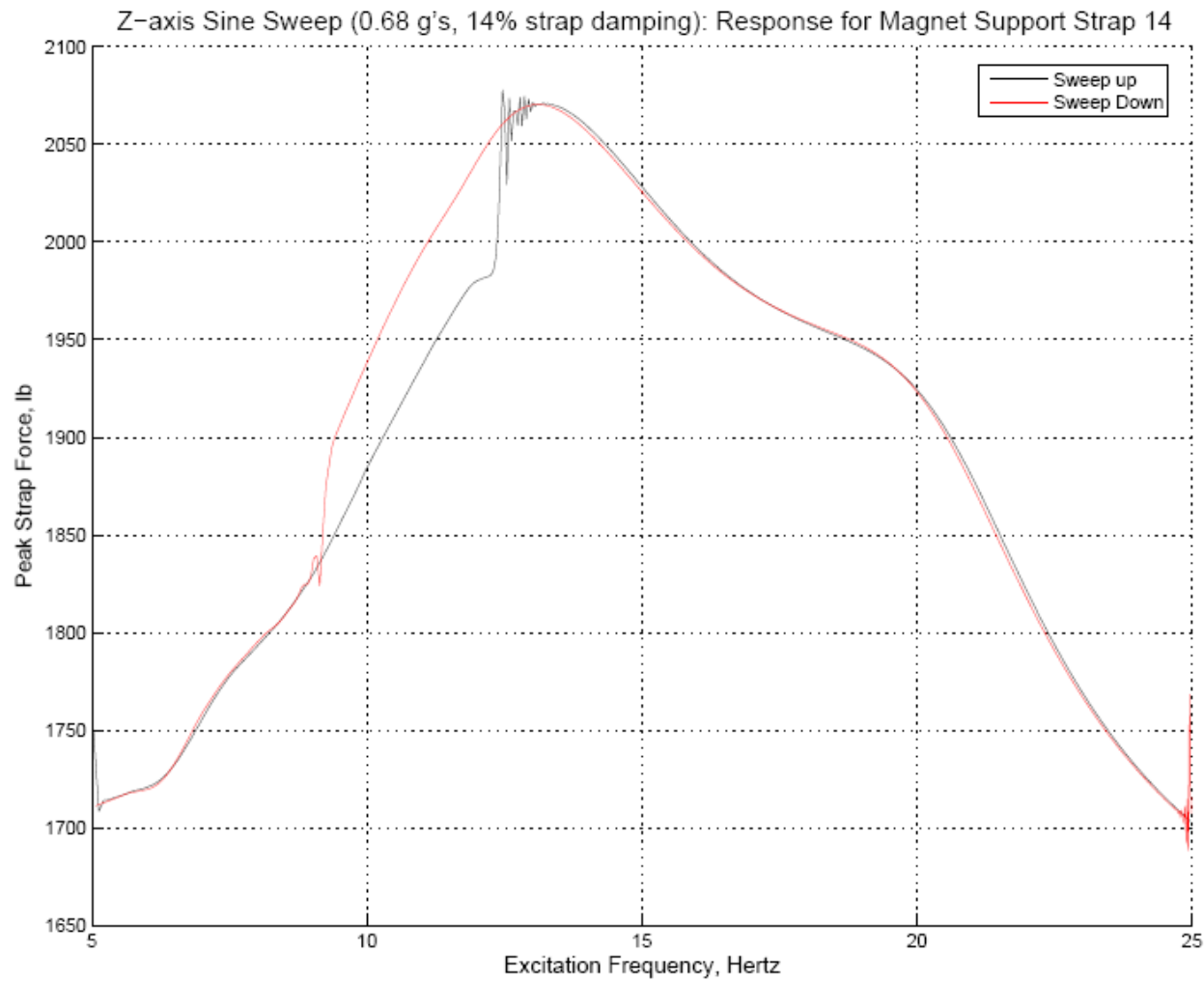


Figure 9-250 Strap 14 frequency response envelope for z-axis 0.68 g excitation

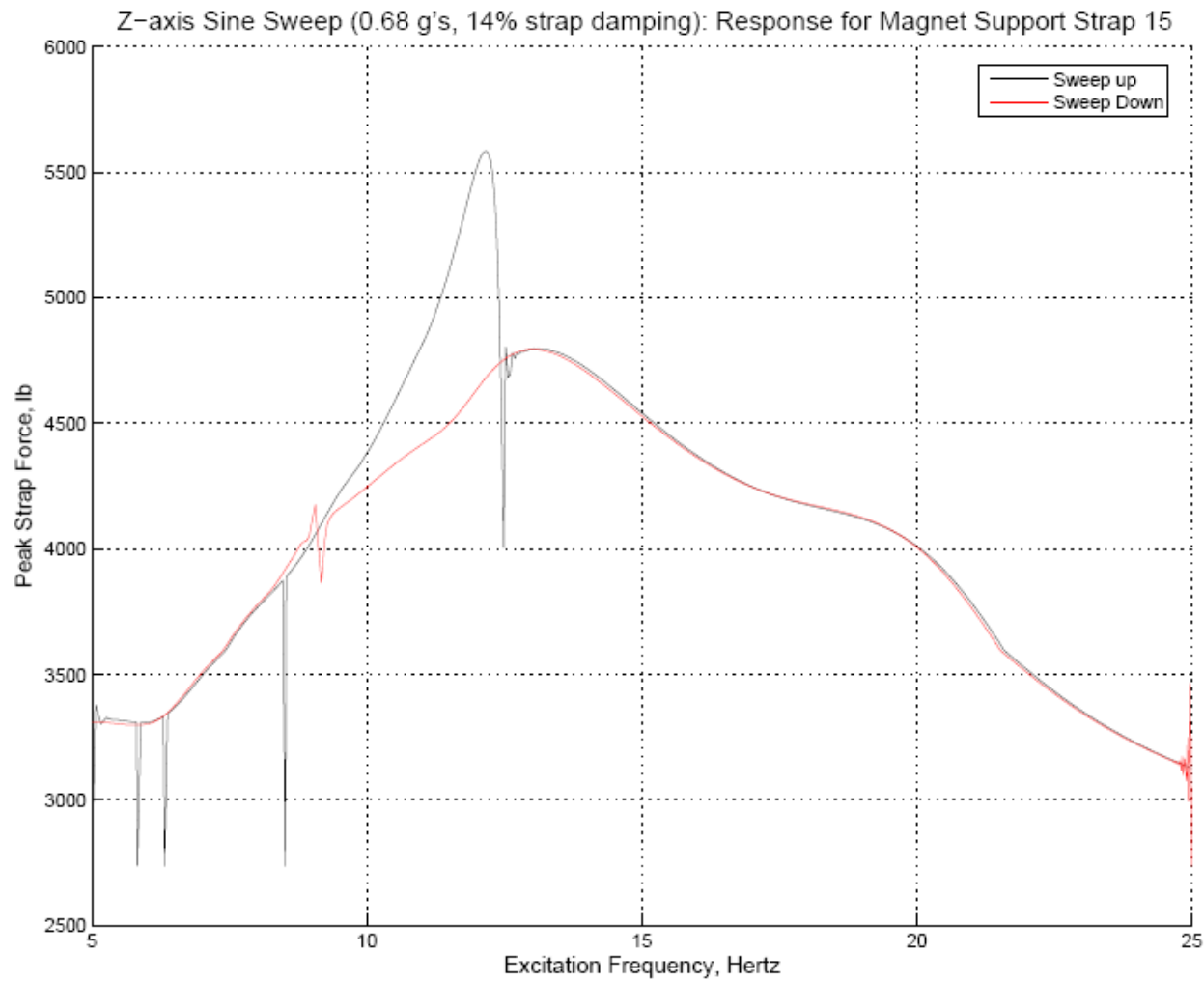


Figure 9-251 Strap 15 frequency response envelope for z-axis 0.68 g excitation

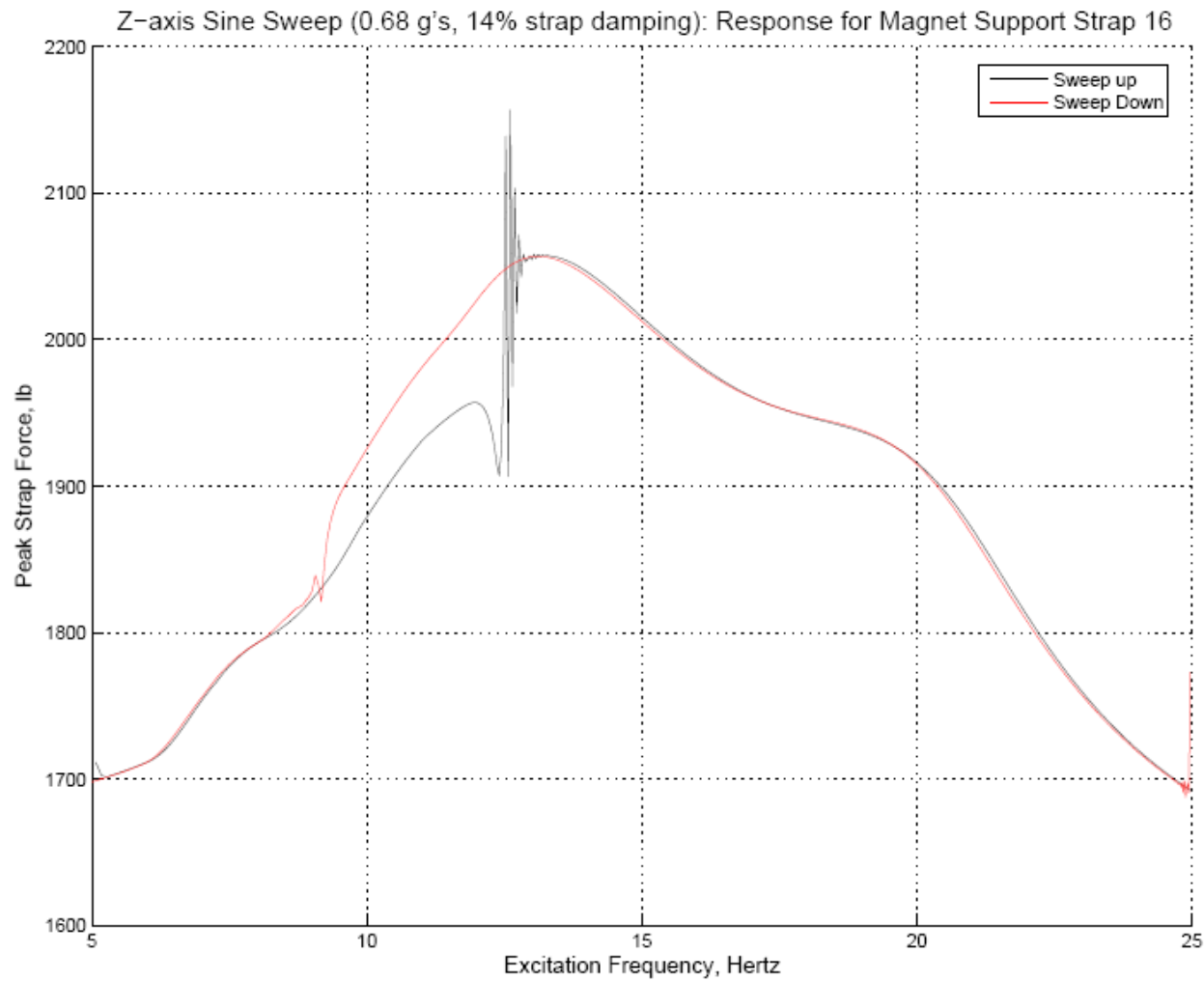


Figure 9-252 Strap 16 frequency response envelope for z-axis 0.68 g excitation

## 10.0 Predicted Dynamic Response at the CMR Accelerometer Locations

Responses at the accelerometer locations on the VCTF and the CMR were computed in the transient analysis for each of the primary load cases. Since the math model of the flight magnet was used in place of a math model of the CMR, the nodal locations are not precisely at the location of the accelerometers; however, they are close enough to make reasonable predictions of the CMR response. The math model nodes and degrees of freedom used to represent the sixteen accelerometer channels are presented in Table 10-1. The channel ID's correspond to the locations previously shown in Figure 8-1.

Table 10-1 Description of Math Model Nodes Used to Represent Accelerometer Locations

| Channel | Description                | Math Model Node | DOF |
|---------|----------------------------|-----------------|-----|
| 1       | Upper surface, +X quadrant | 91004           | Y   |
| 2       | Upper surface, +X quadrant | 91004           | Z   |
| 3       | Lower surface, +X quadrant | 91017           | Y   |
| 4       | Lower surface, +X quadrant | 91017           | Z   |
| 5       | Upper surface, -X quadrant | 91068           | Y   |
| 6       | Upper surface, -X quadrant | 91068           | Z   |
| 7       | Lower surface, -X quadrant | 91123           | Y   |
| 8       | Lower surface, -X quadrant | 91123           | Z   |
| 9       | Upper surface, +Y quadrant | 97401           | X   |
| 10      | Upper surface, +Y quadrant | 97401           | Z   |
| 11      | Lower surface, +Y quadrant | 97402           | X   |
| 12      | Lower surface, +Y quadrant | 97402           | Z   |
| 13      | Upper surface, -Y quadrant | 97403           | X   |
| 14      | Upper surface, -Y quadrant | 97403           | Z   |
| 15      | Lower surface, -Y quadrant | 97404           | X   |
| 16      | Lower surface, -Y quadrant | 97405           | Z   |

Plots of the responses for the sixteen accelerometer locations on the CMR are presented in Figure 10-1 through 10-16 for the x-axis case with 0.35 g excitation.

Plots of the responses for the sixteen accelerometer locations on the CMR are presented in Figure 10-16 through 10-32 for the y-axis case with 0.37 g excitation.

Plots of the responses for the sixteen accelerometer locations on the CMR are presented in Figure 10-33 through 10-48 for the z-axis case with 0.68 g excitation.

In general, the lateral acceleration of the CMR may be too small to accurately measure for the lower excitation levels. However, the response in the direction of the shaker excitation has a measurable level for all planned excitation levels. The acceleration responses for the lower level excitation cases have not been included in this report, but are available on request.



The higher excitation levels typically have measurable responses for all of the accelerometers. For the highest planned excitation case (0.68 g's for the z-axis configuration), the peak acceleration is approximately 12 g's as shown in Figure 10-34 and Figure 10-36.

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91004: upper +X

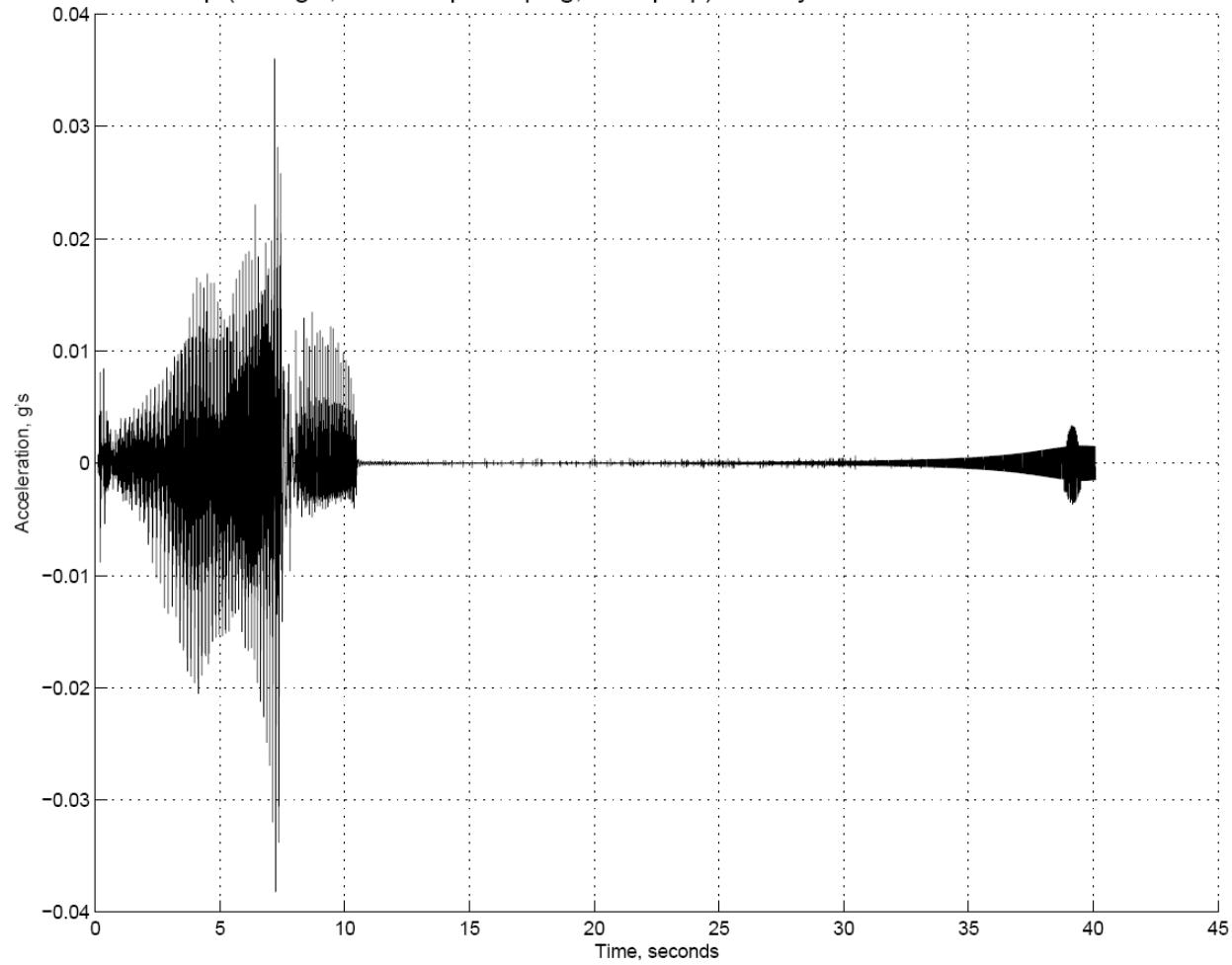
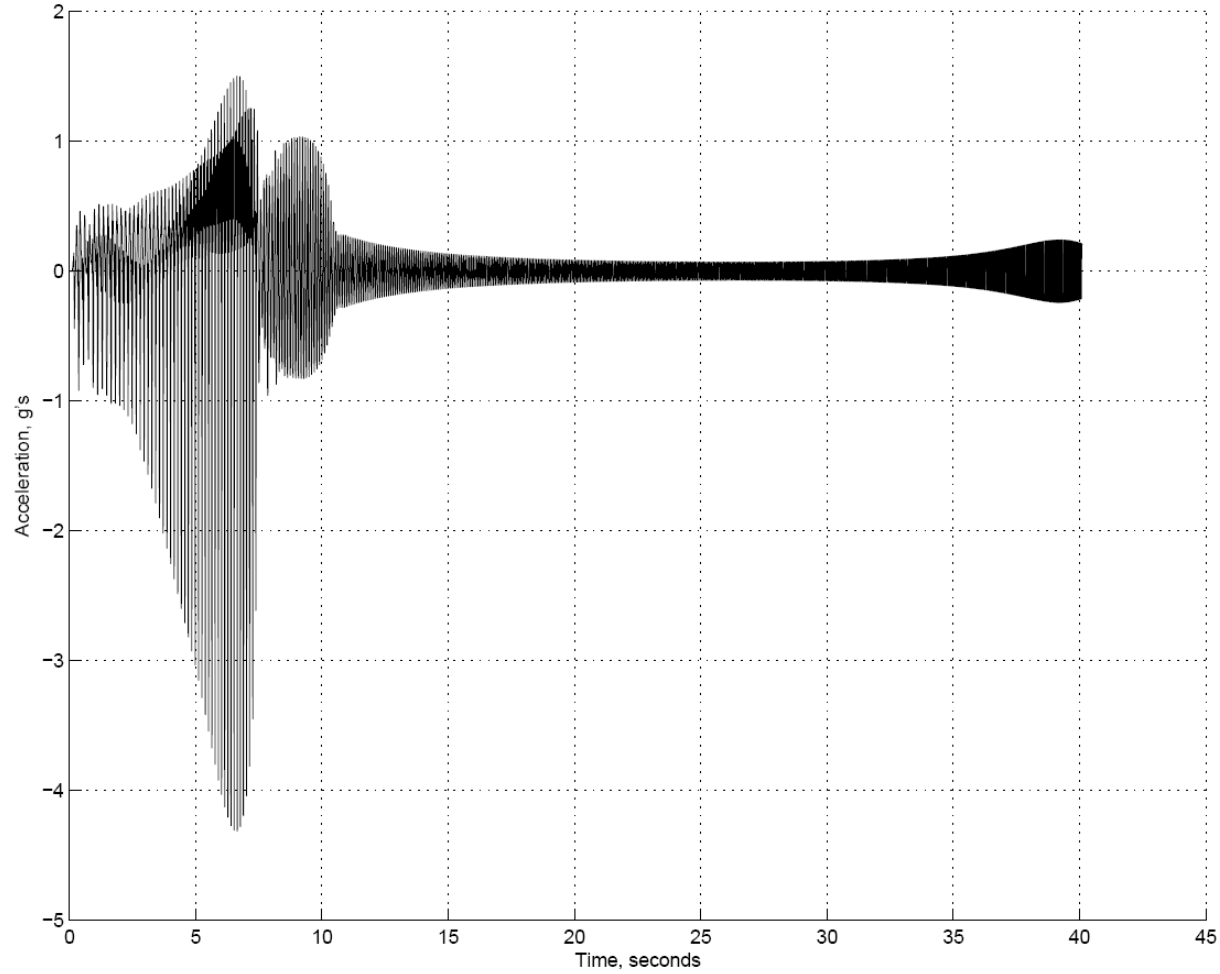


Figure 10-1 Channel 1 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91004: upper +X



**Figure 10-2** Channel 2 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91017: lower +X

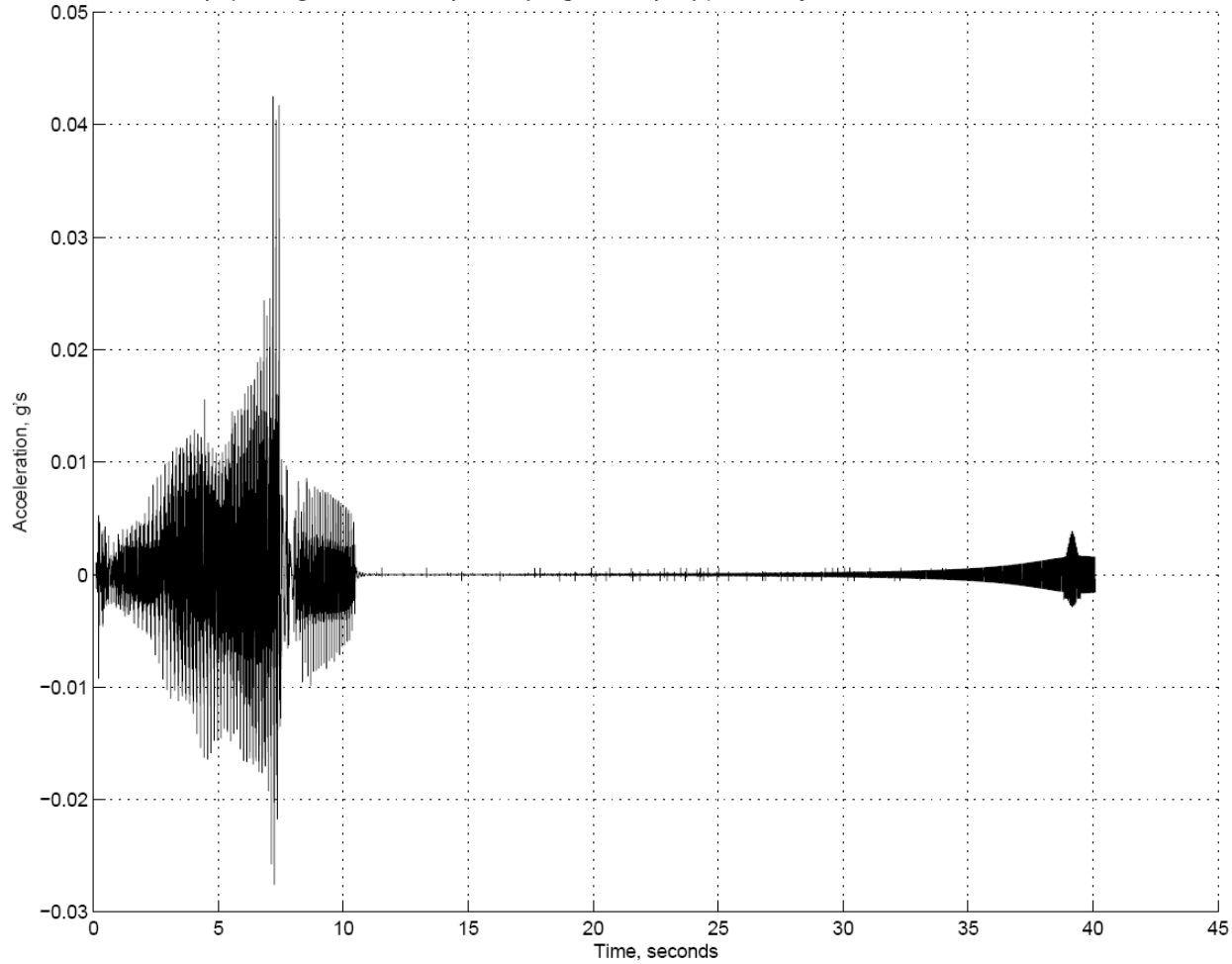
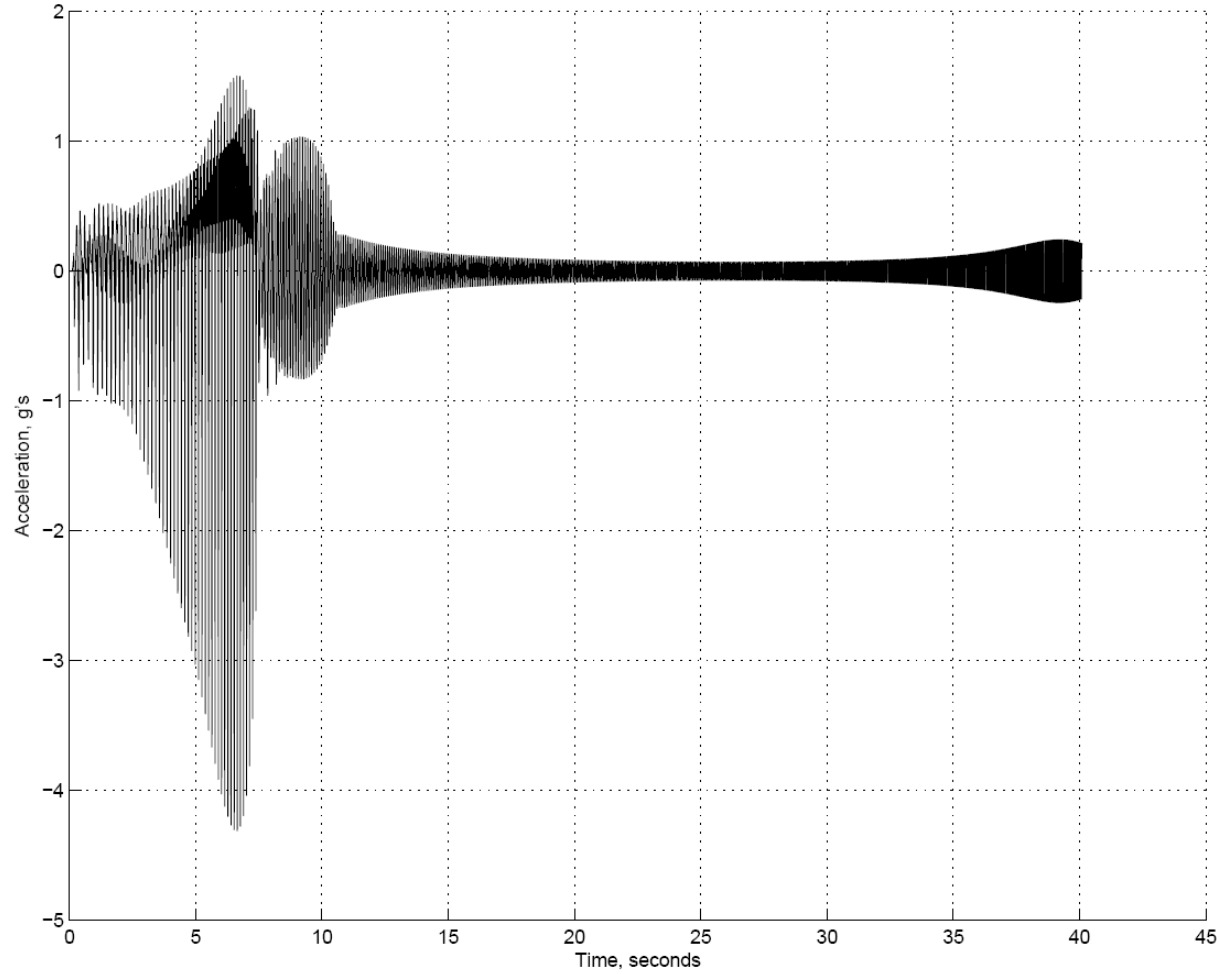


Figure 10-3 Channel 3 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91017: lower +X



**Figure 10-4** Channel 4 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91068: upper -X

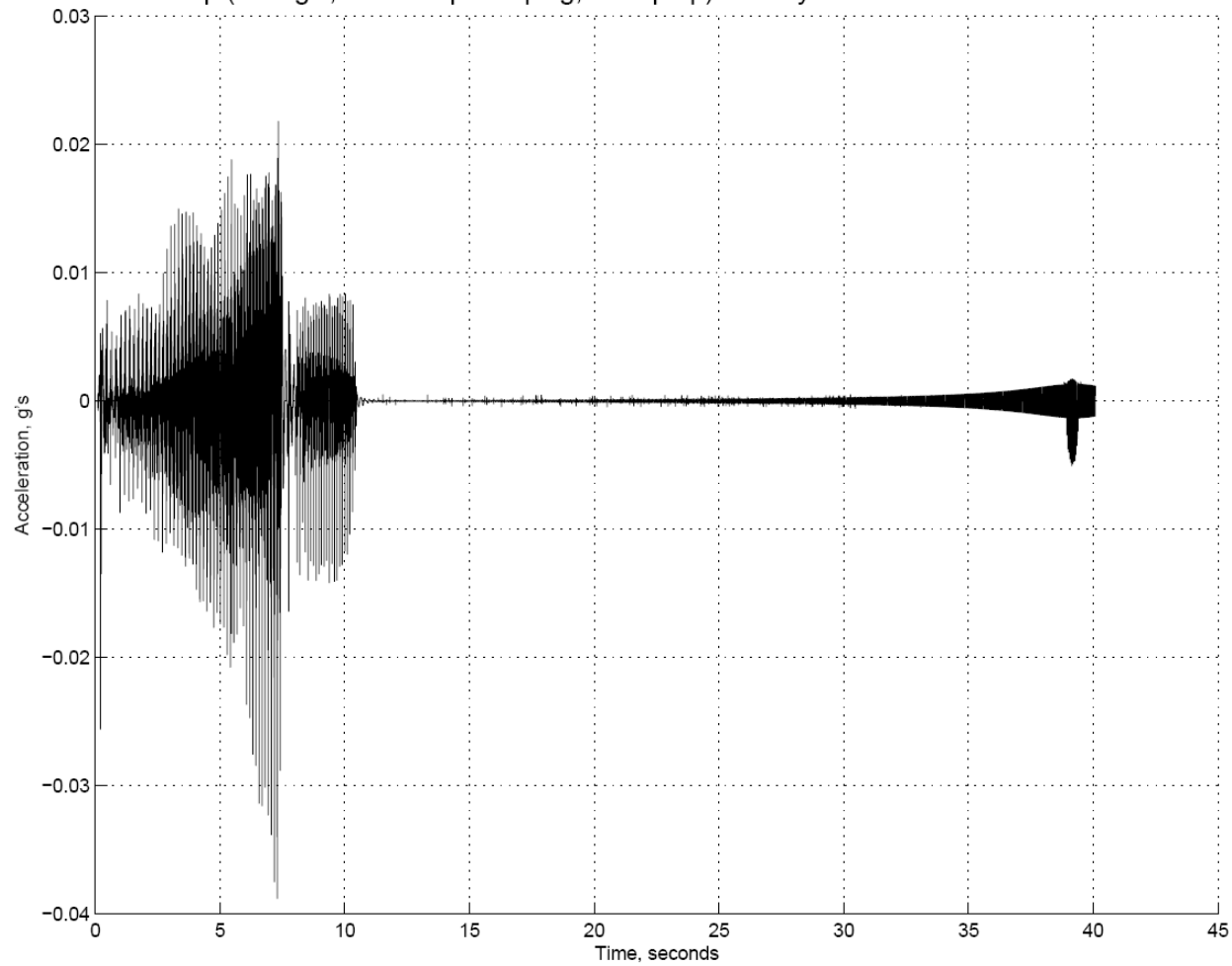


Figure 10-5 Channel 5 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91068: upper -X

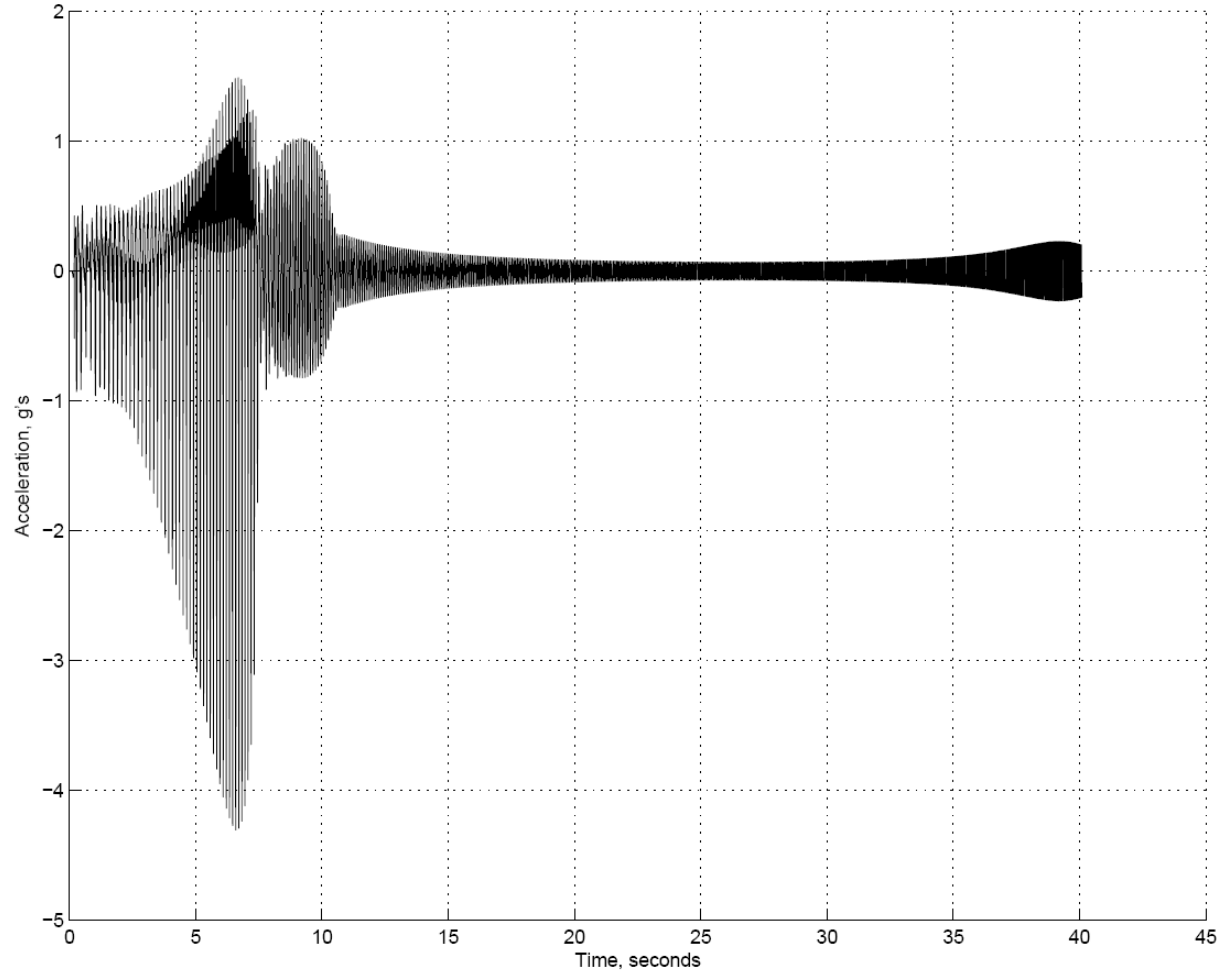


Figure 10-6 Channel 6 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91123: lower -X

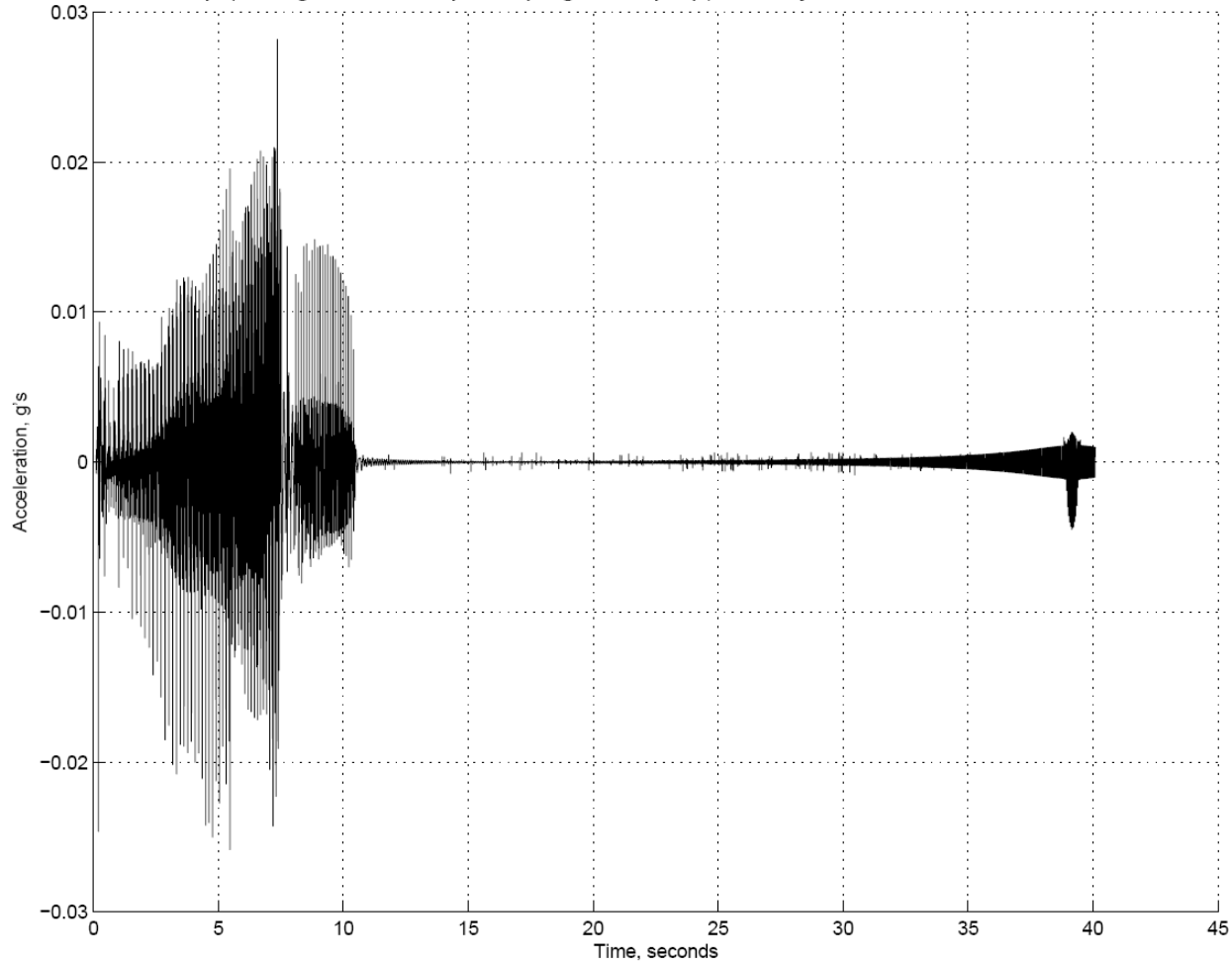
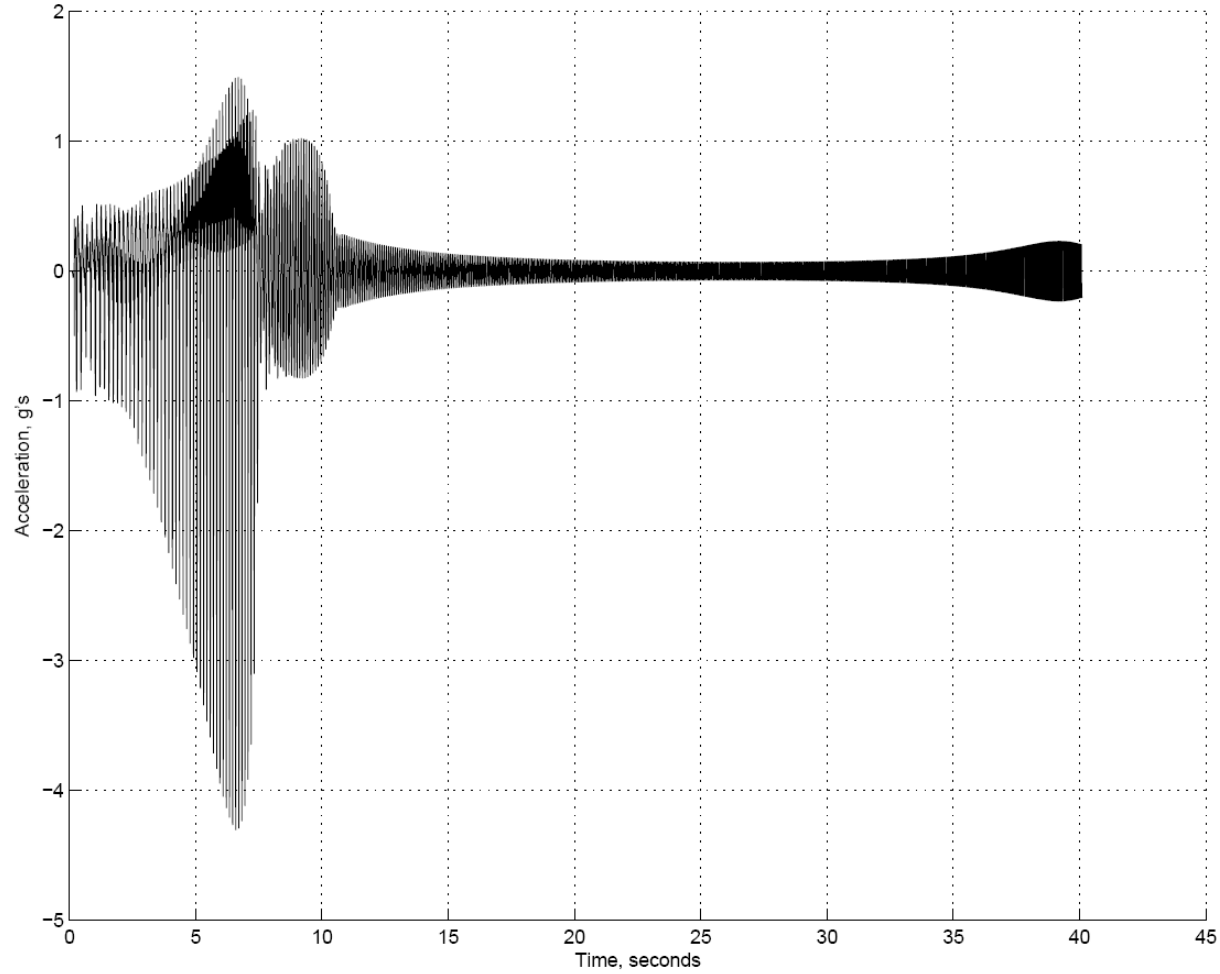


Figure 10-7 Channel 7 accelerometer response for the x-axis configuration with 0.35 g excitation

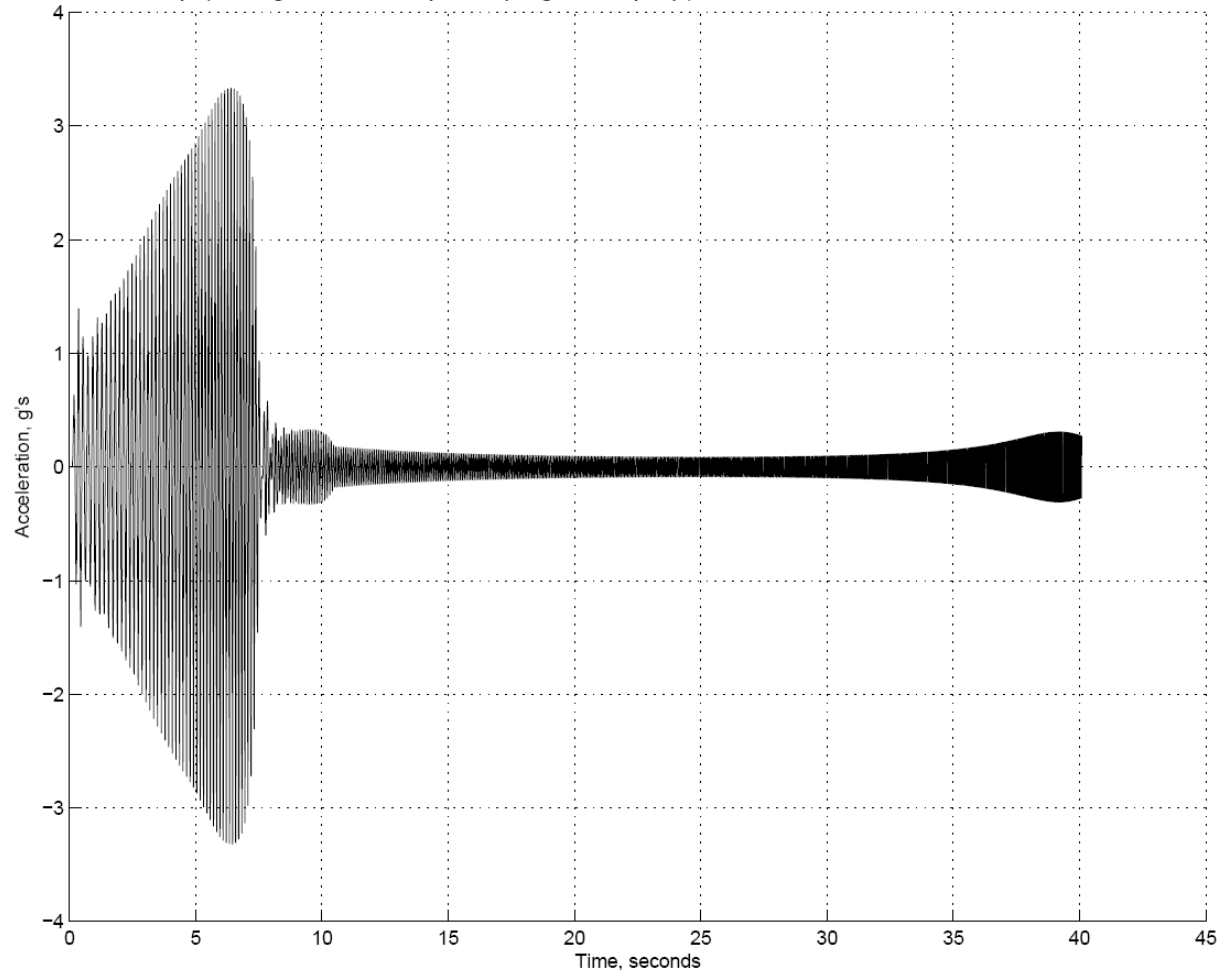


X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91123: lower -X



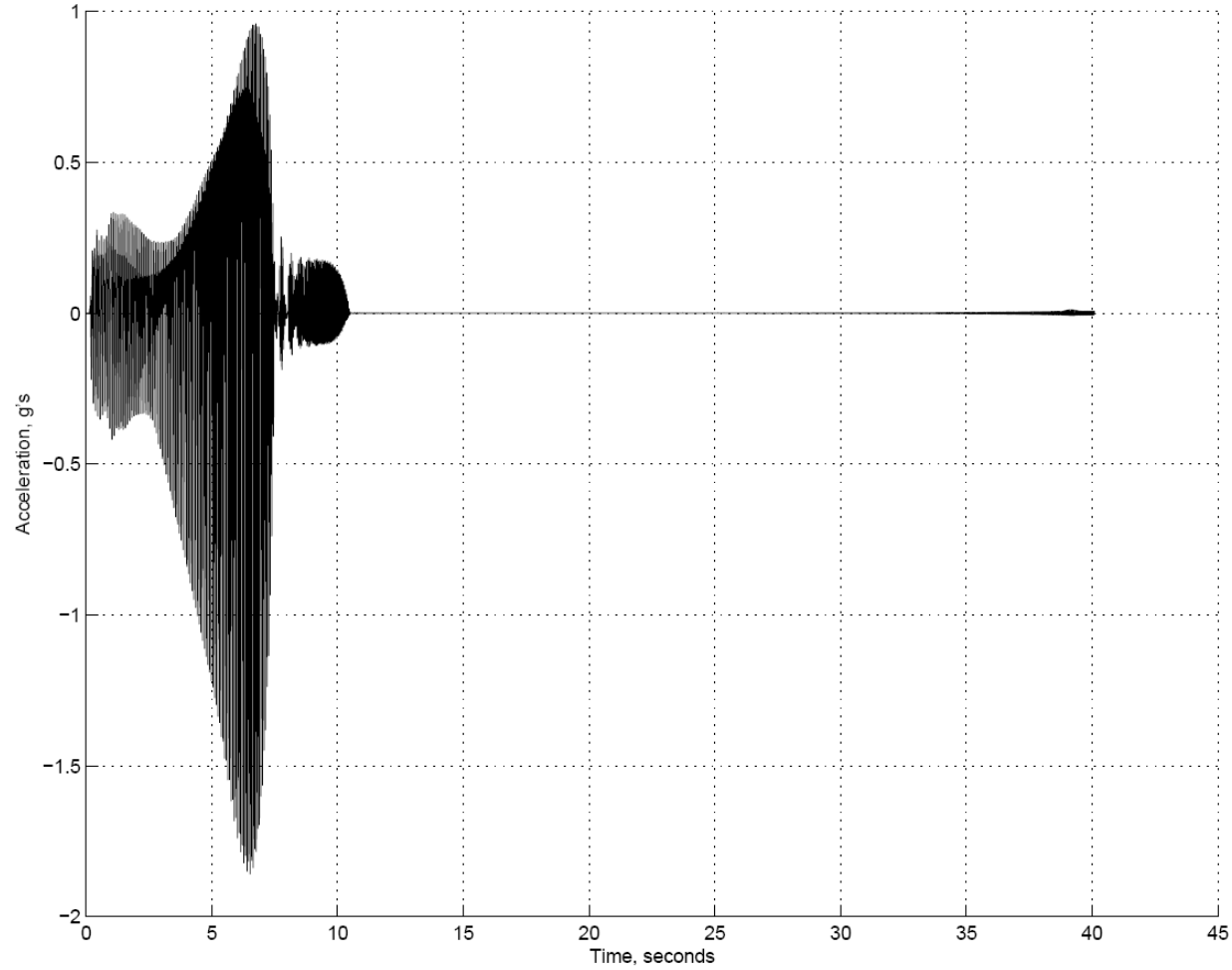
**Figure 10-8** Channel 8 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97401: upper +Y



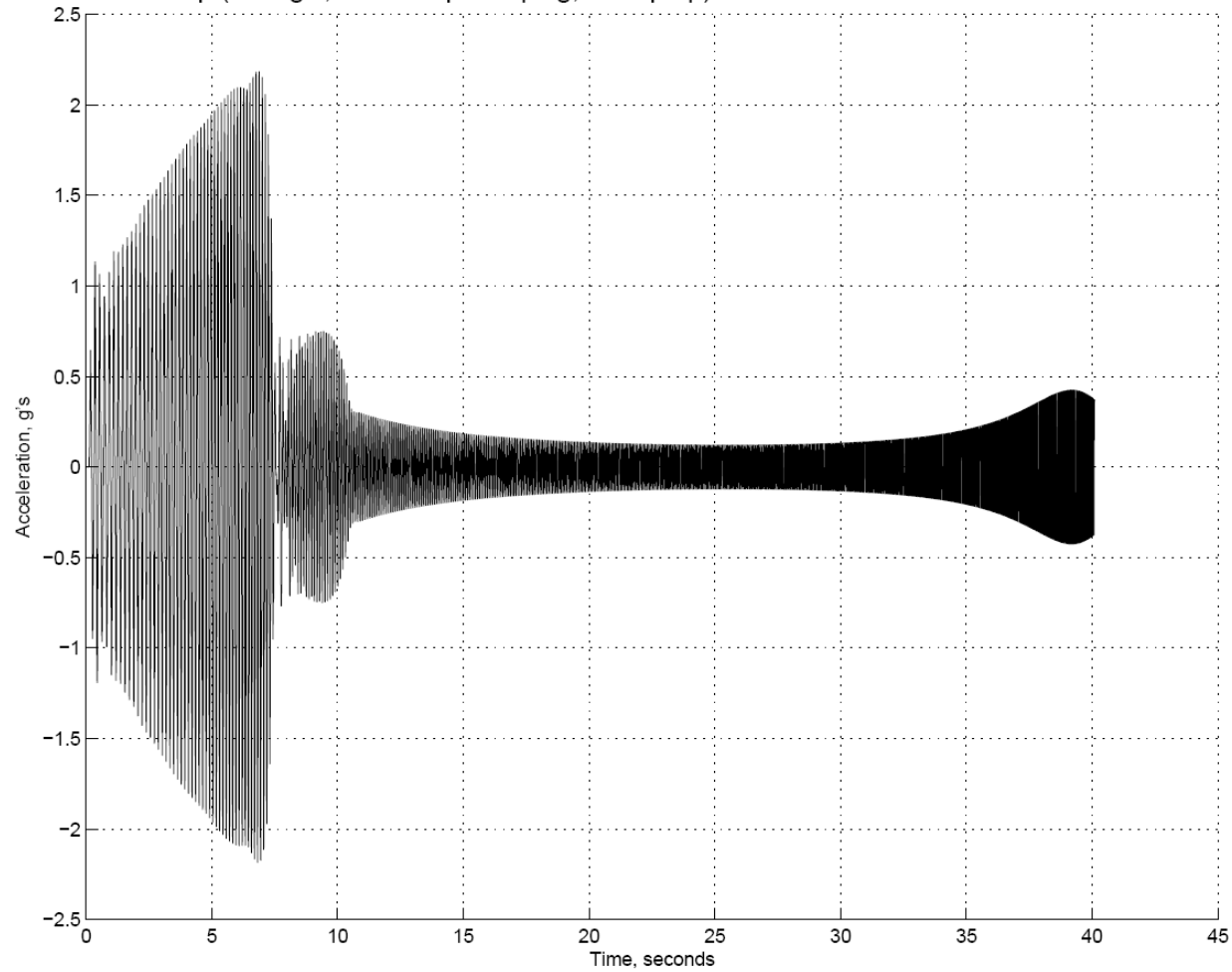
**Figure 10-9** Channel 9 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97401: upper +Y



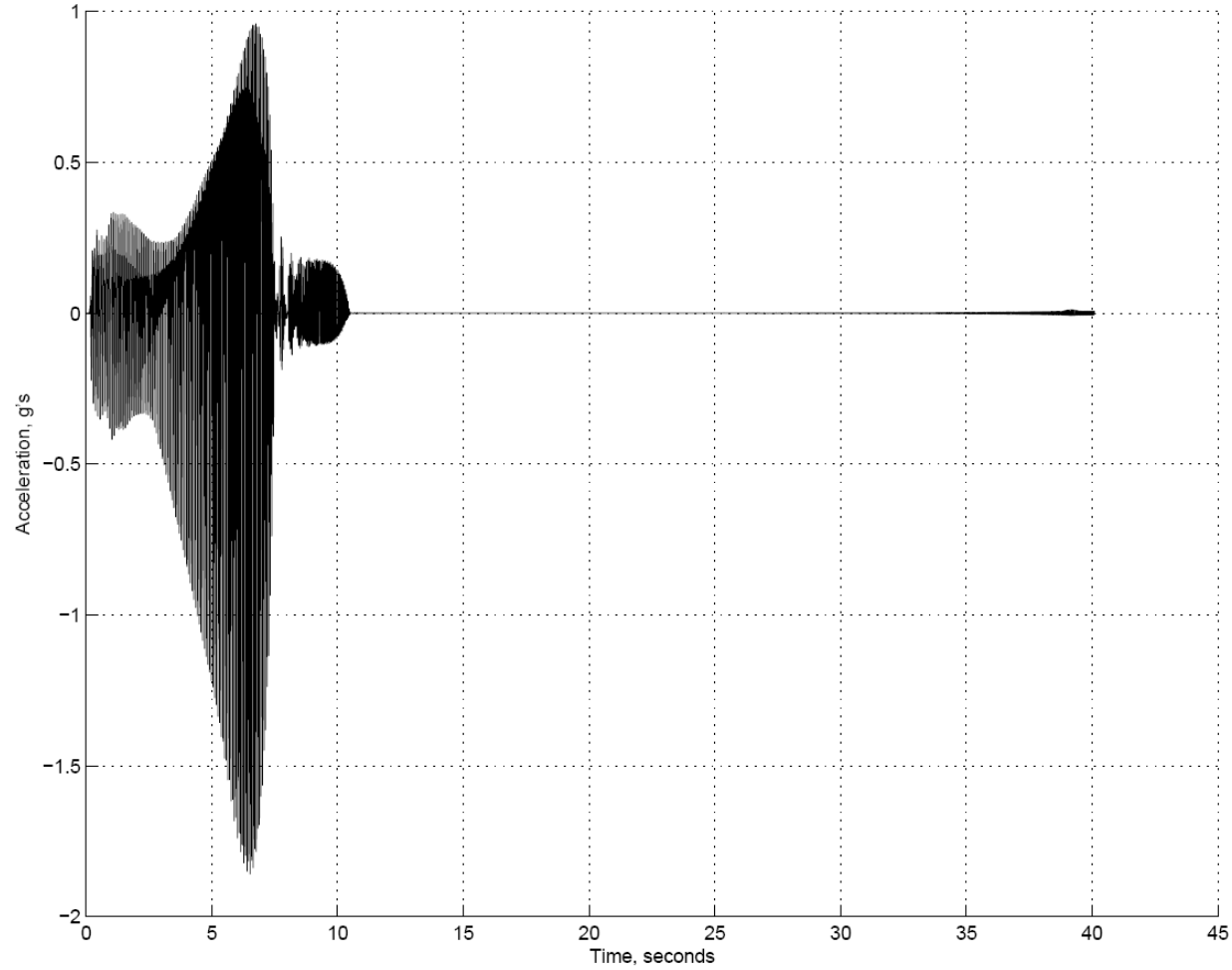
**Figure 10-10** Channel 10 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97402: lower +Y



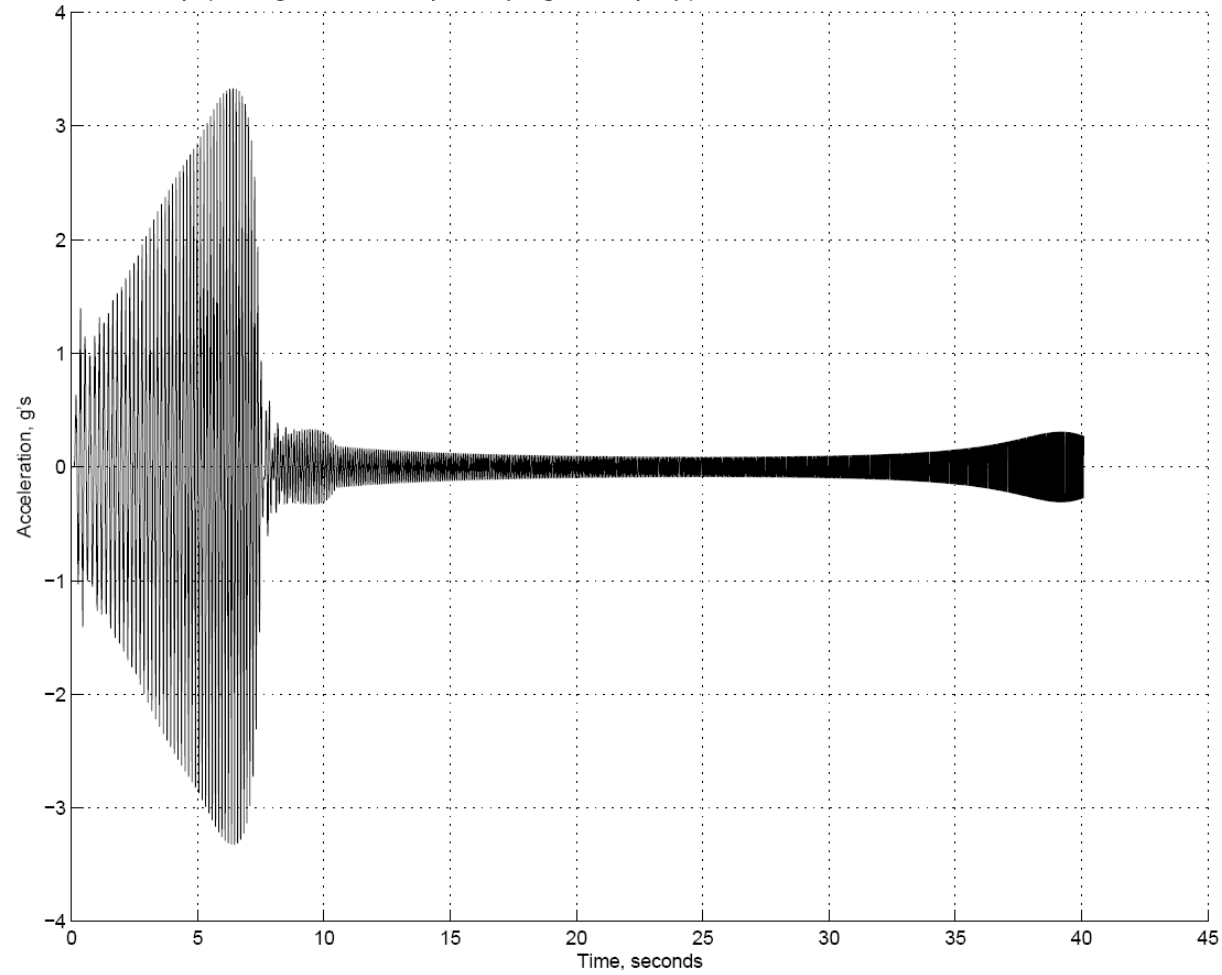
**Figure 10-11** Channel 11 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97402: lower +Y



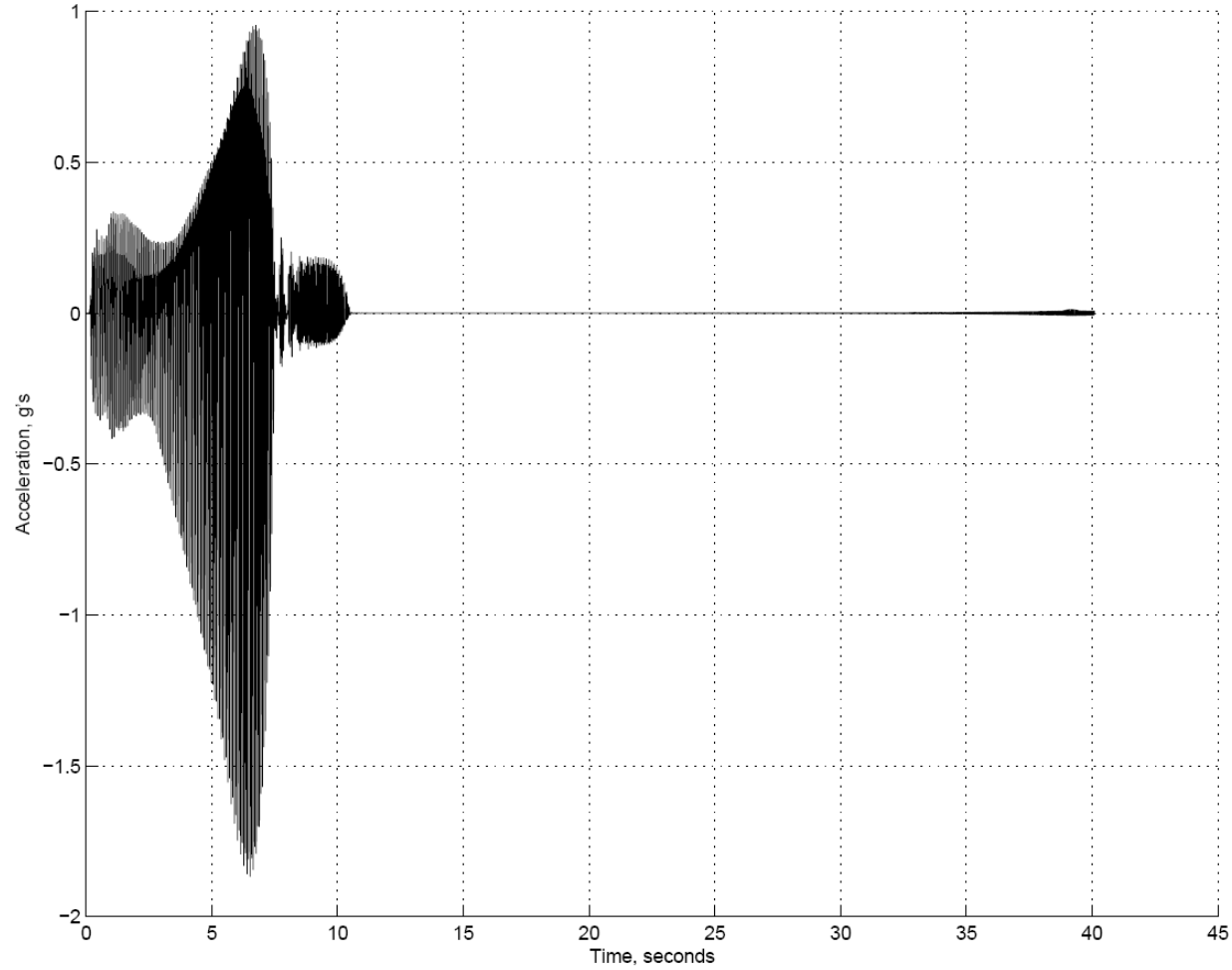
**Figure 10-12** Channel 12 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97403: upper -Y



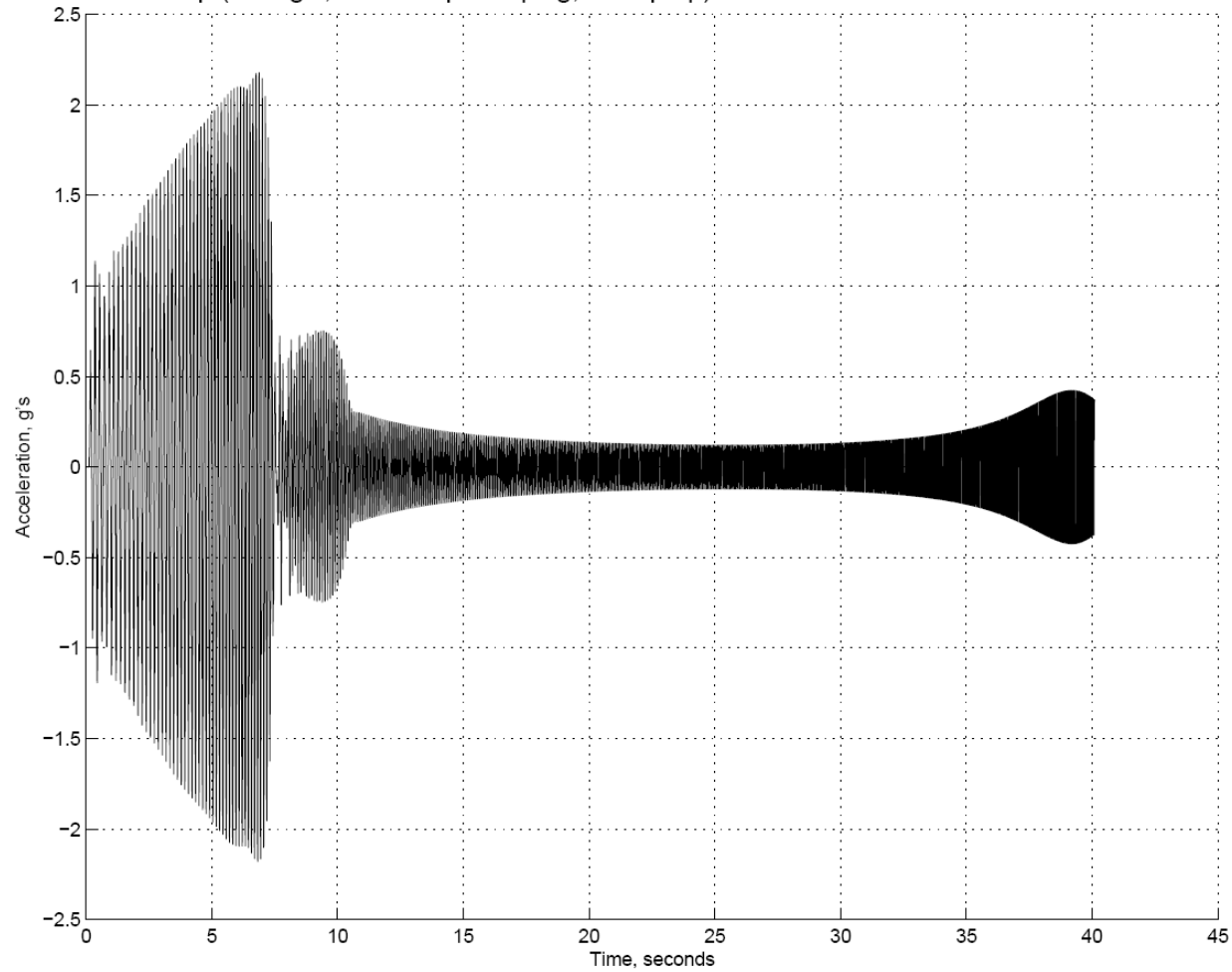
**Figure 10-13** Channel 13 accelerometer response for the x-axis configuration with 0.35 g excitation

X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97403: upper -Y



**Figure 10-14** Channel 14 accelerometer response for the x-axis configuration with 0.35 g excitation

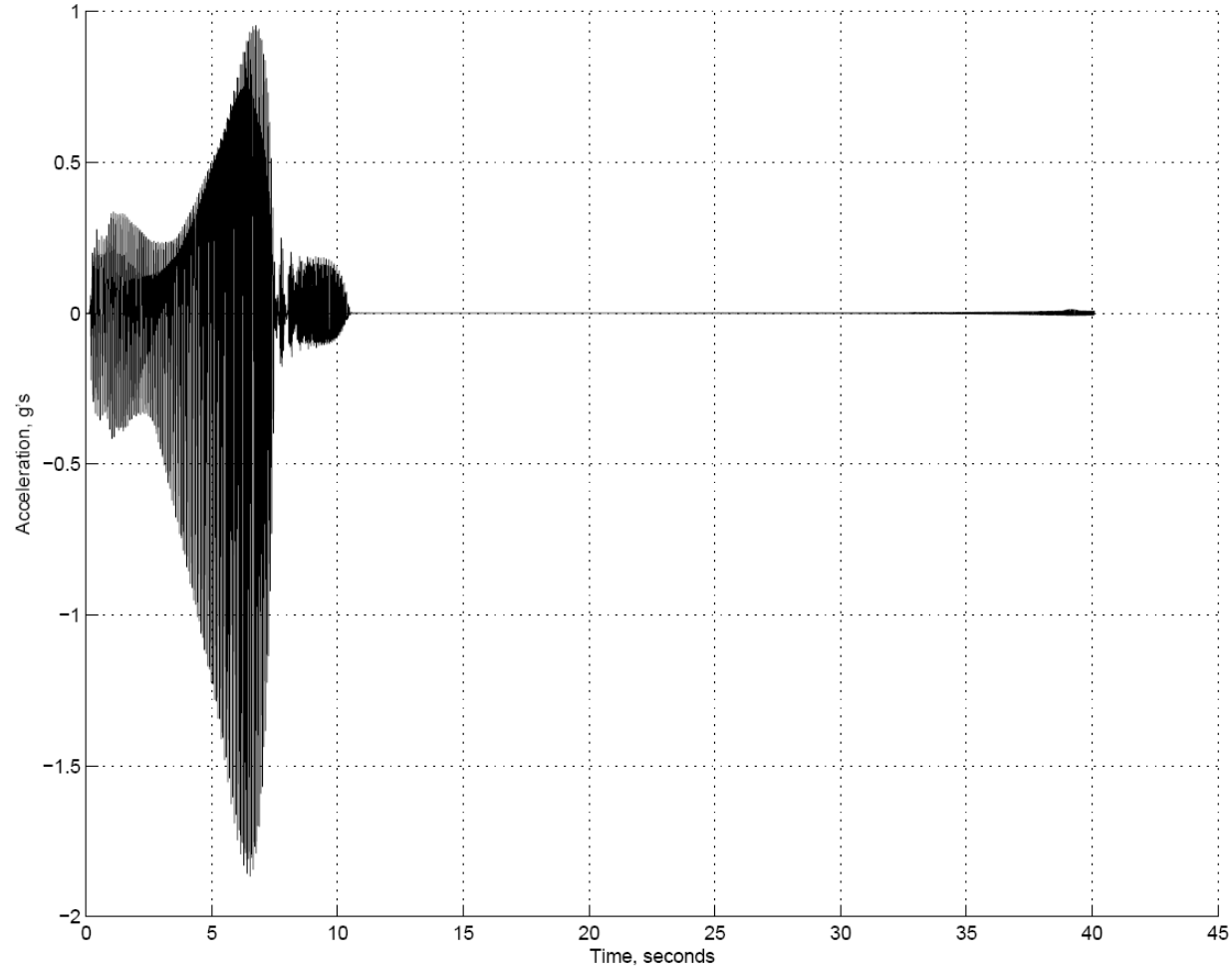
X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97404: lower -Y



**Figure 10-15** Channel 15 accelerometer response for the x-axis configuration with 0.35 g excitation

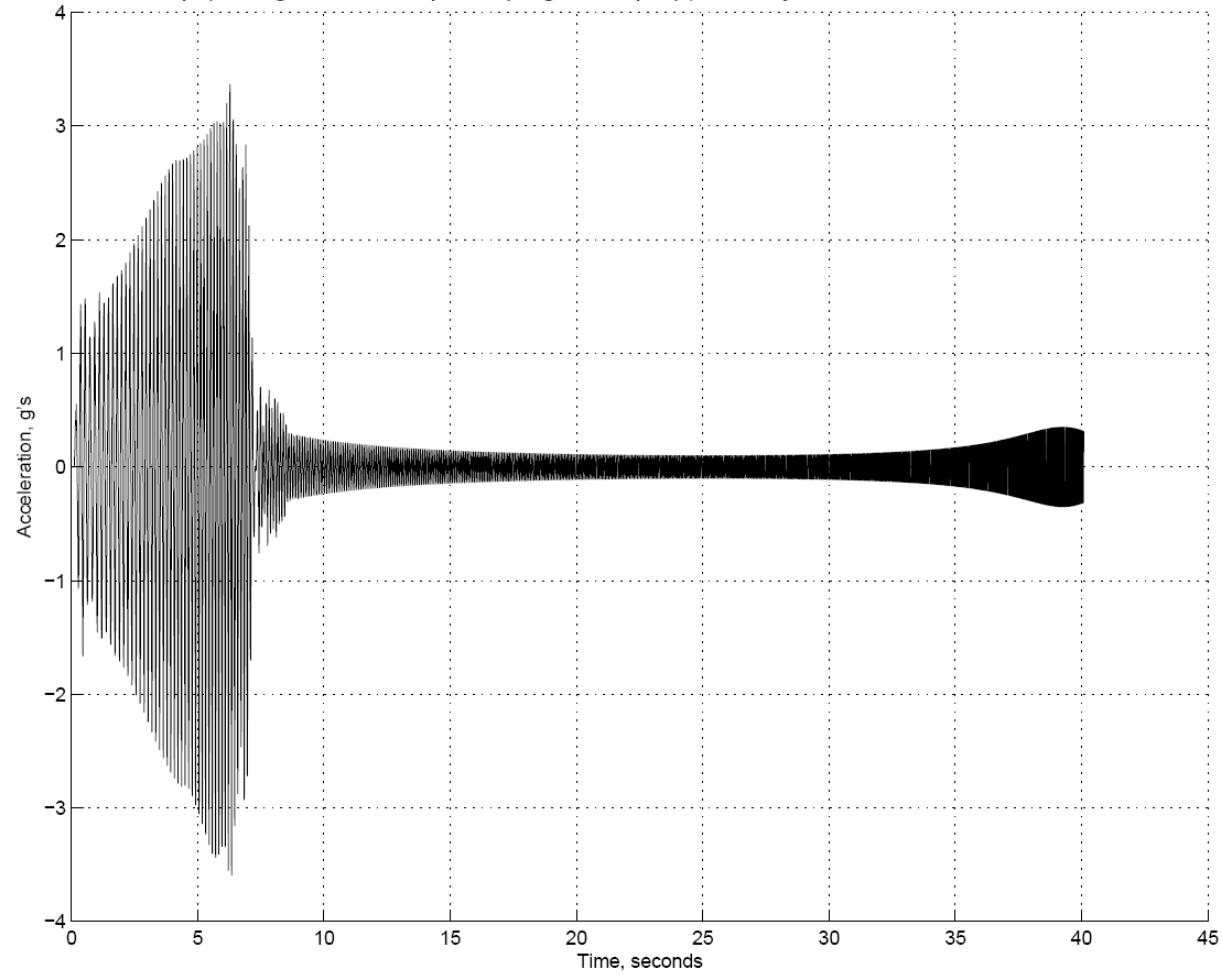


X-axis Sine Sweep (0.35 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97404: lower -Y



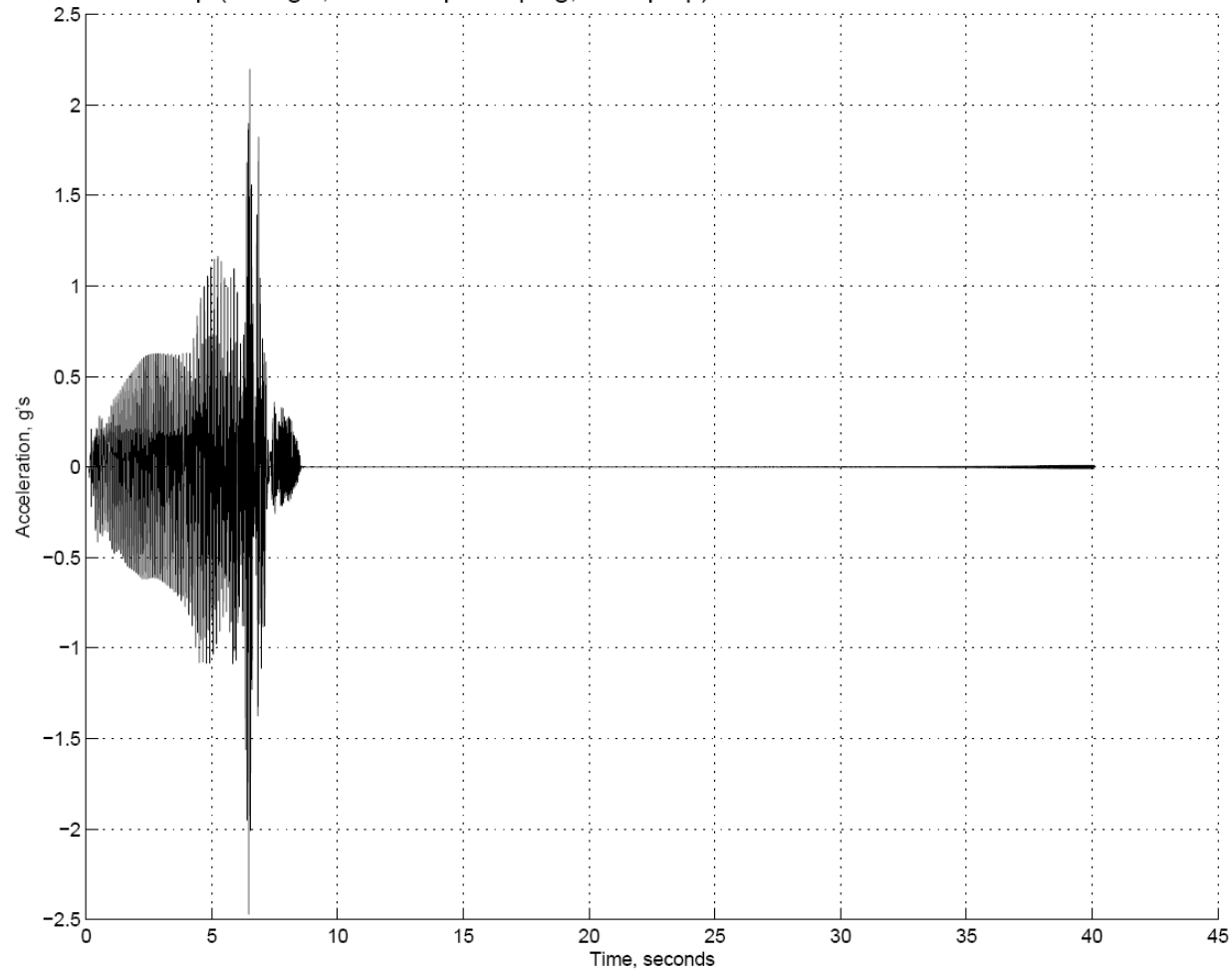
**Figure 10-16** Channel 16 accelerometer response for the x-axis configuration with 0.35 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91004: upper +X



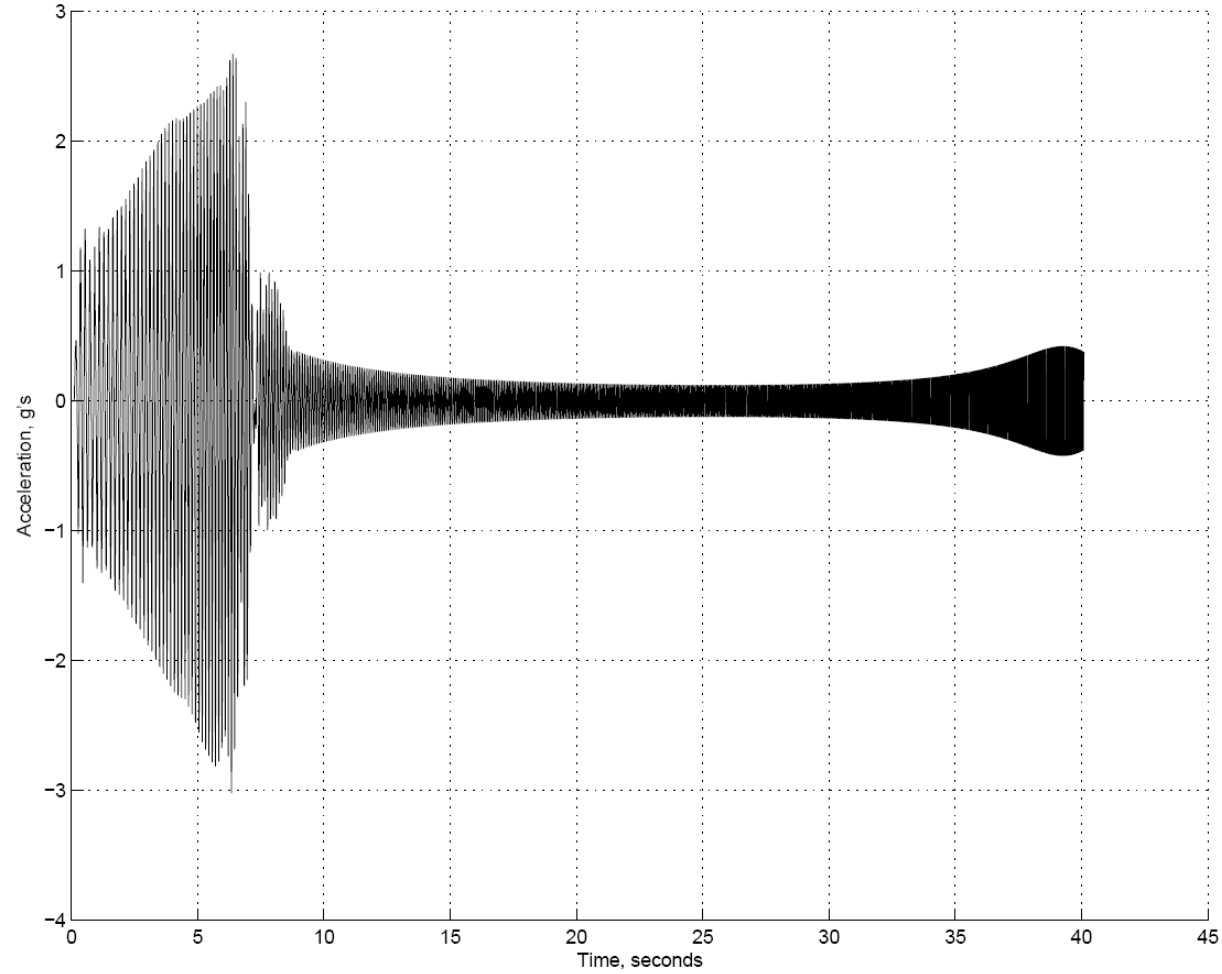
**Figure 10-17** Channel 1 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91004: upper +X



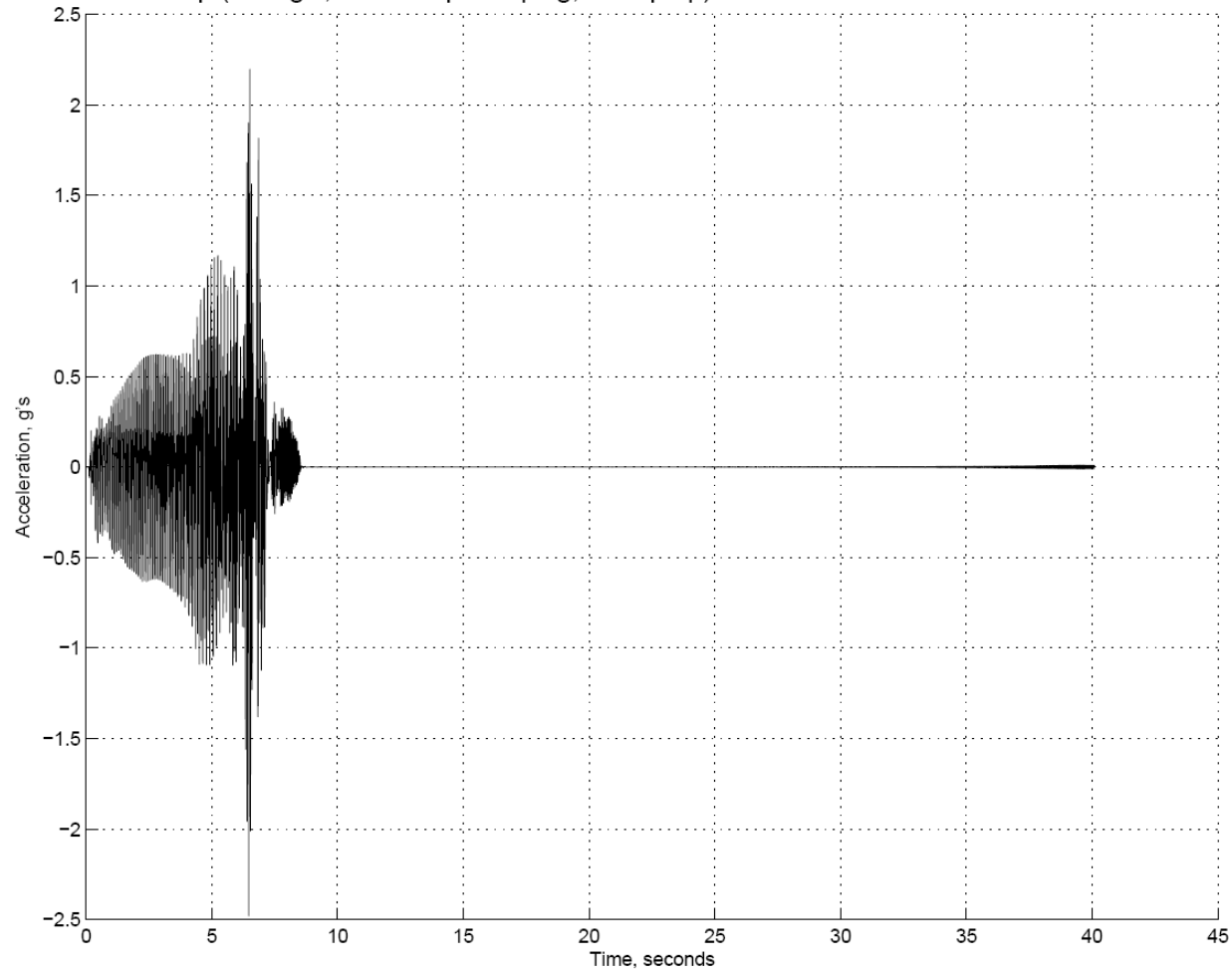
**Figure 10-18** Channel 2 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91017: lower +X



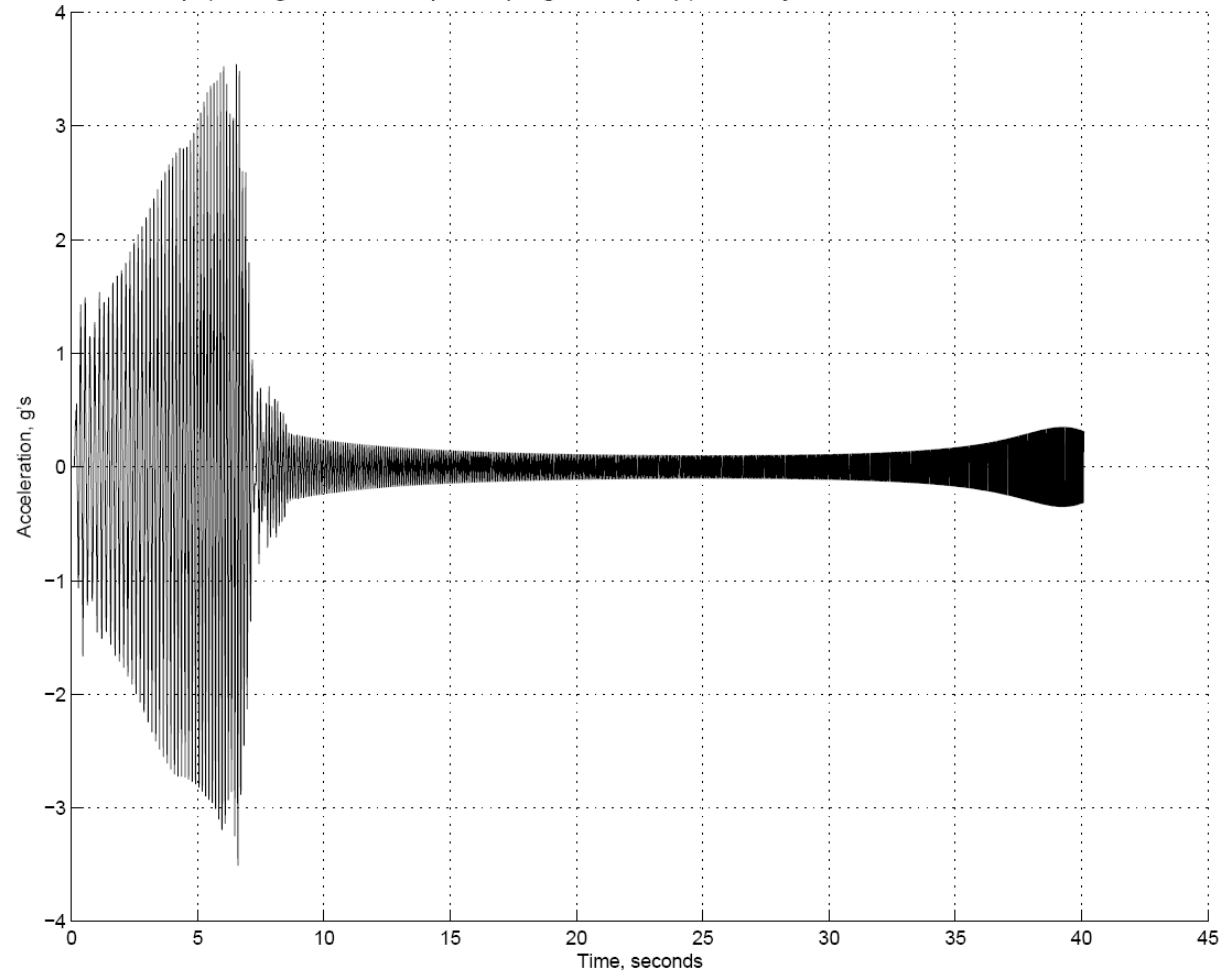
**Figure 10-19** Channel 3 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91017: lower +X



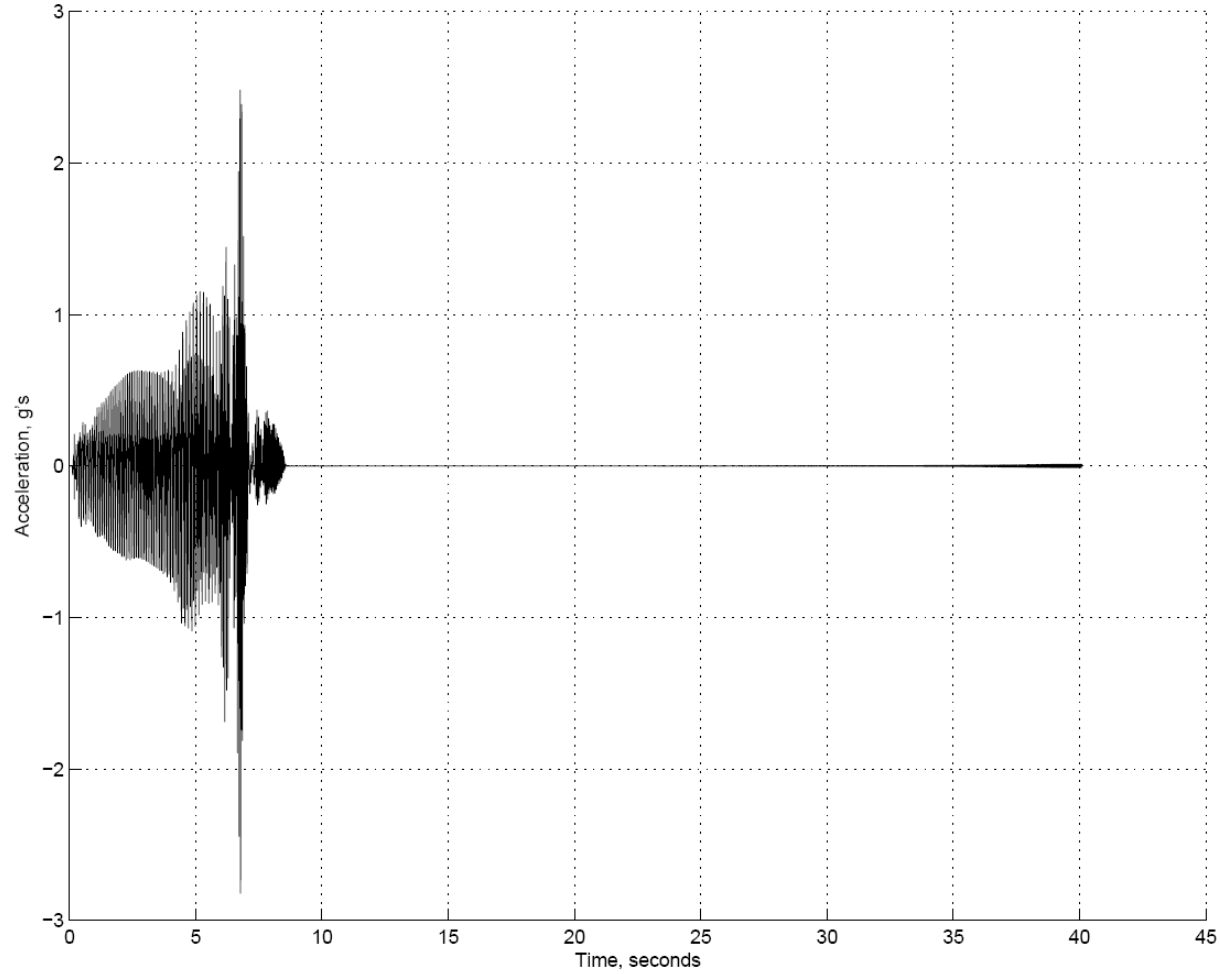
**Figure 10-20** Channel 4 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91068: upper -X



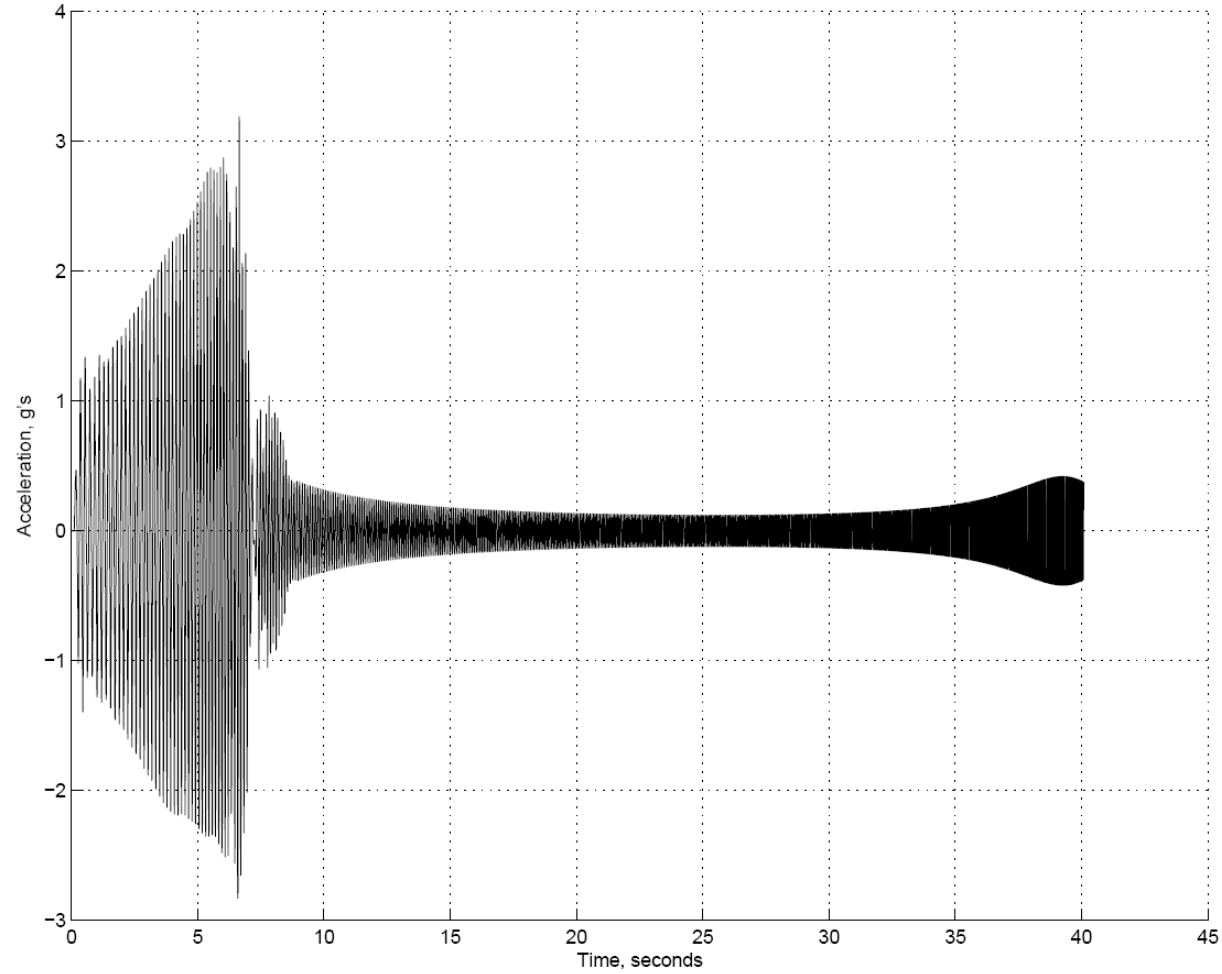
**Figure 10-21** Channel 5 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91068: upper -X



**Figure 10-22** Channel 6 accelerometer response for the y-axis configuration with 0.37 g excitation

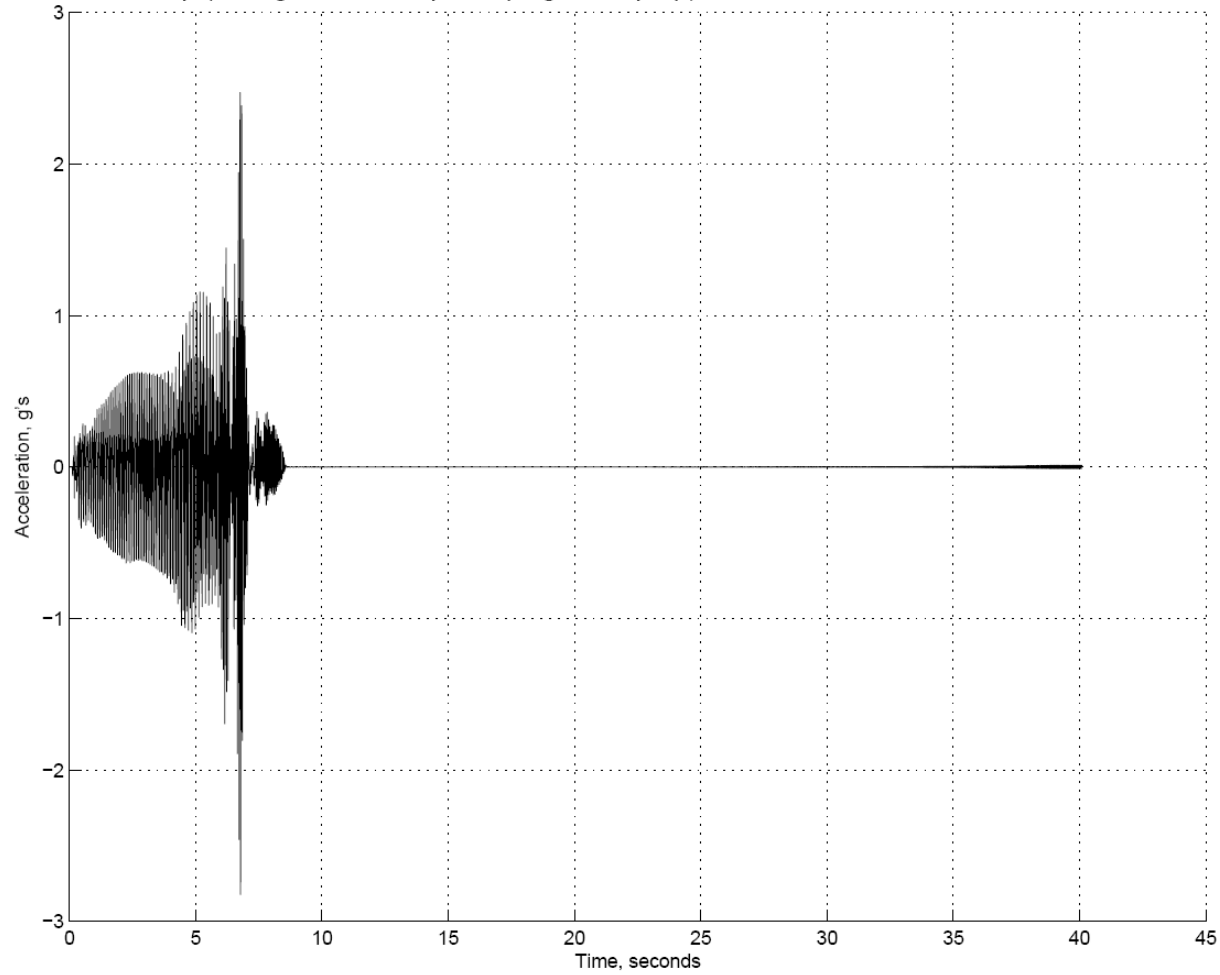
Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91123: lower -X



**Figure 10-23** Channel 7 accelerometer response for the y-axis configuration with 0.37 g excitation

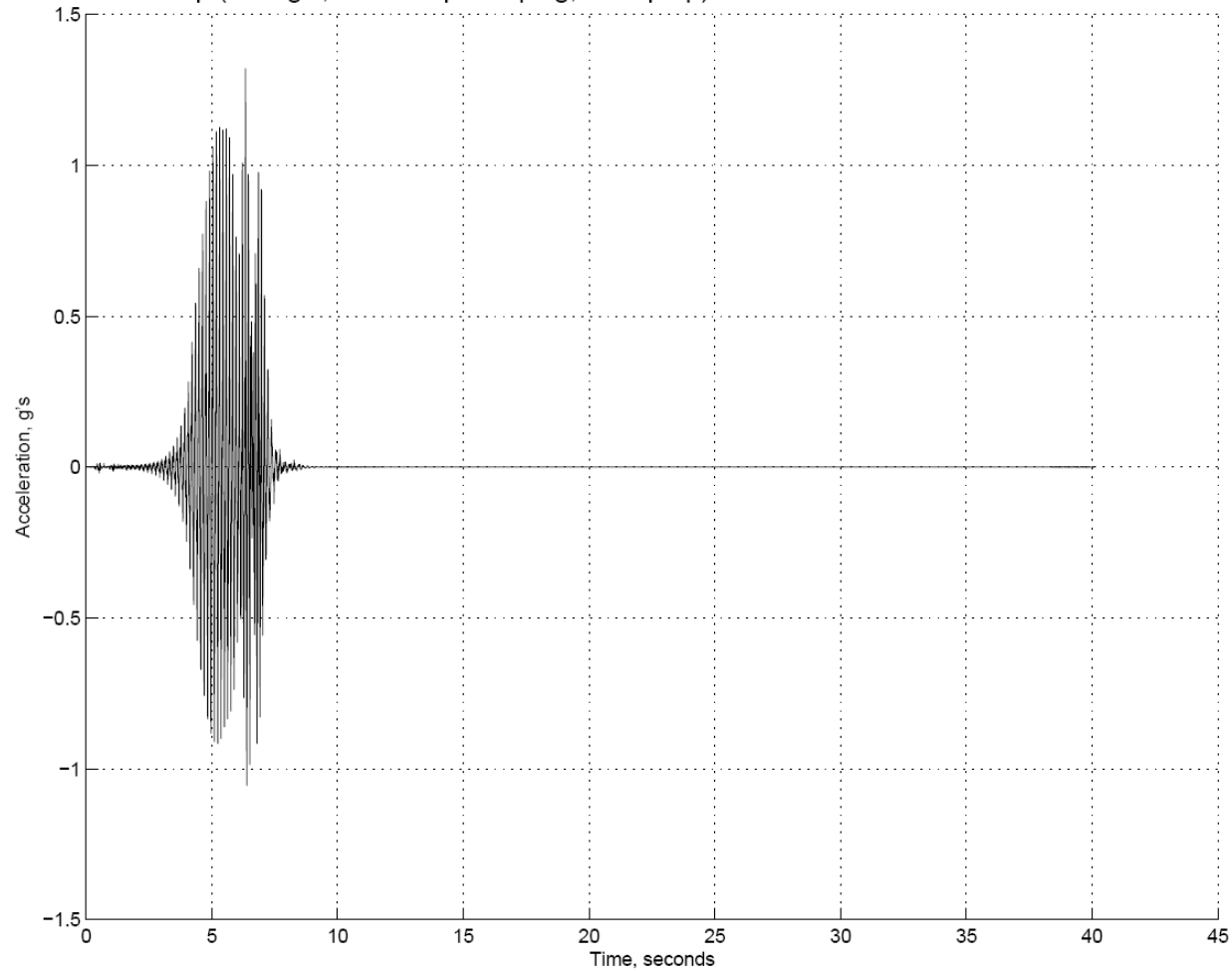


Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91123: lower -X



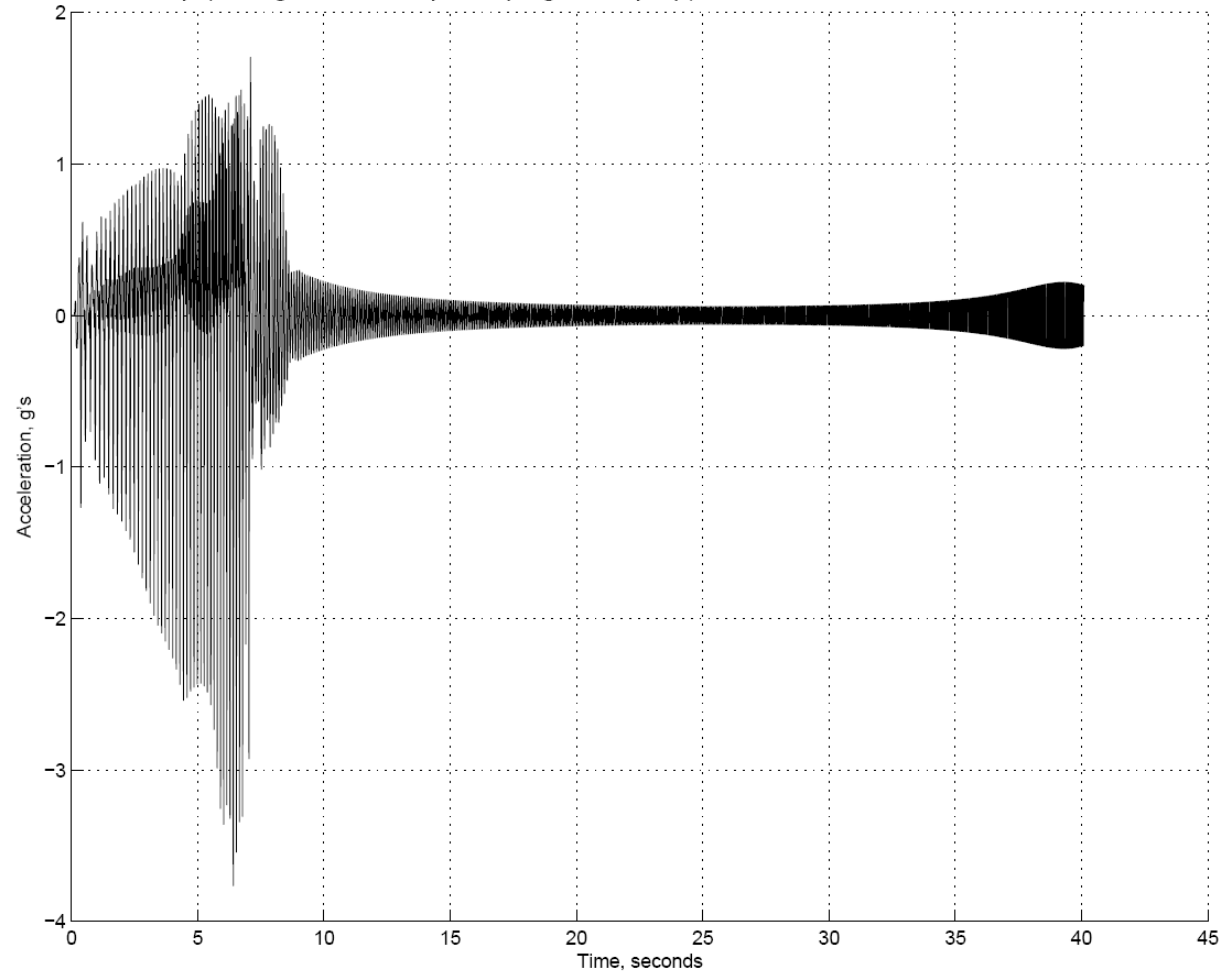
**Figure 10-24** Channel 8 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97401: upper +Y



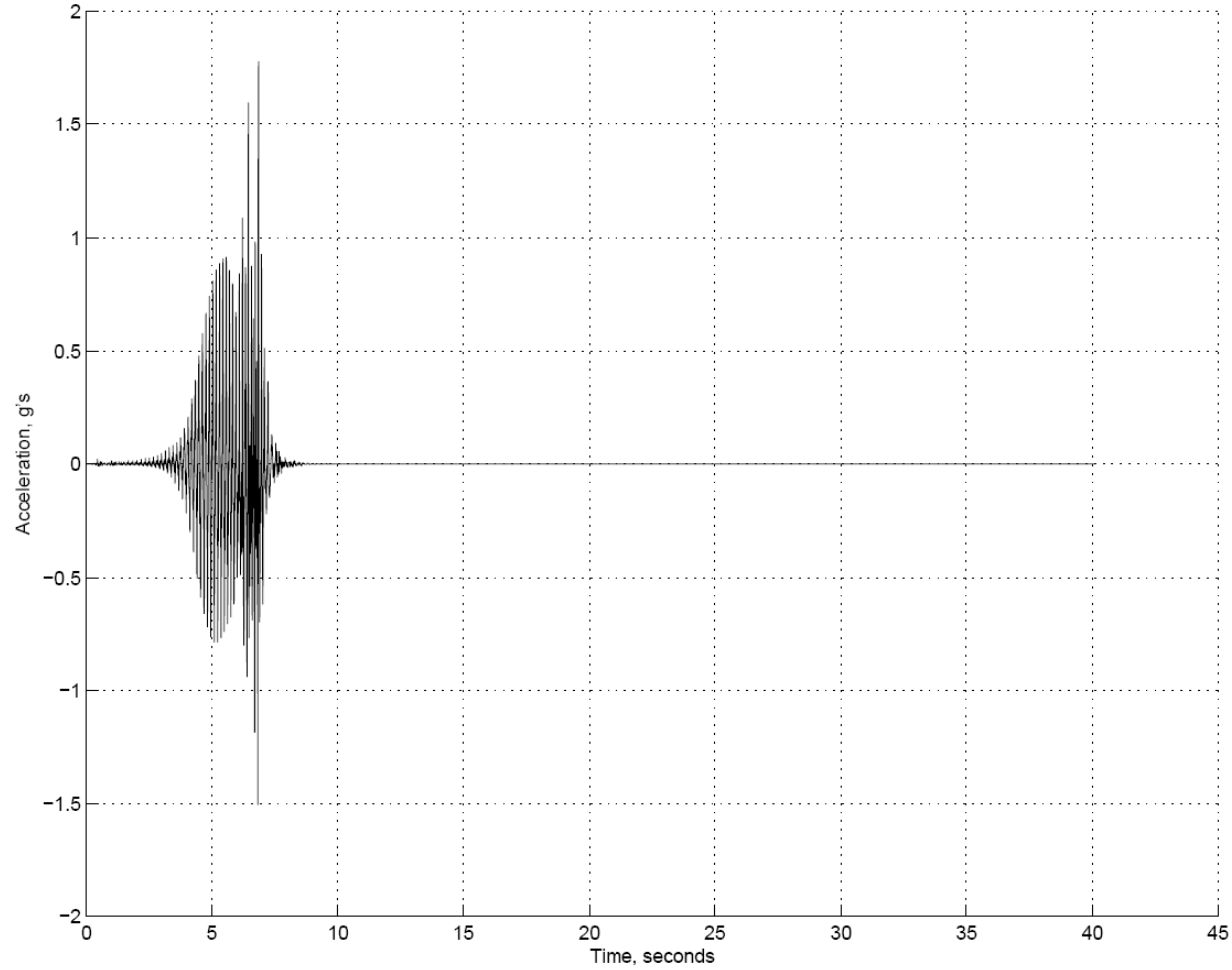
**Figure 10-25** Channel 9 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97401: upper +Y



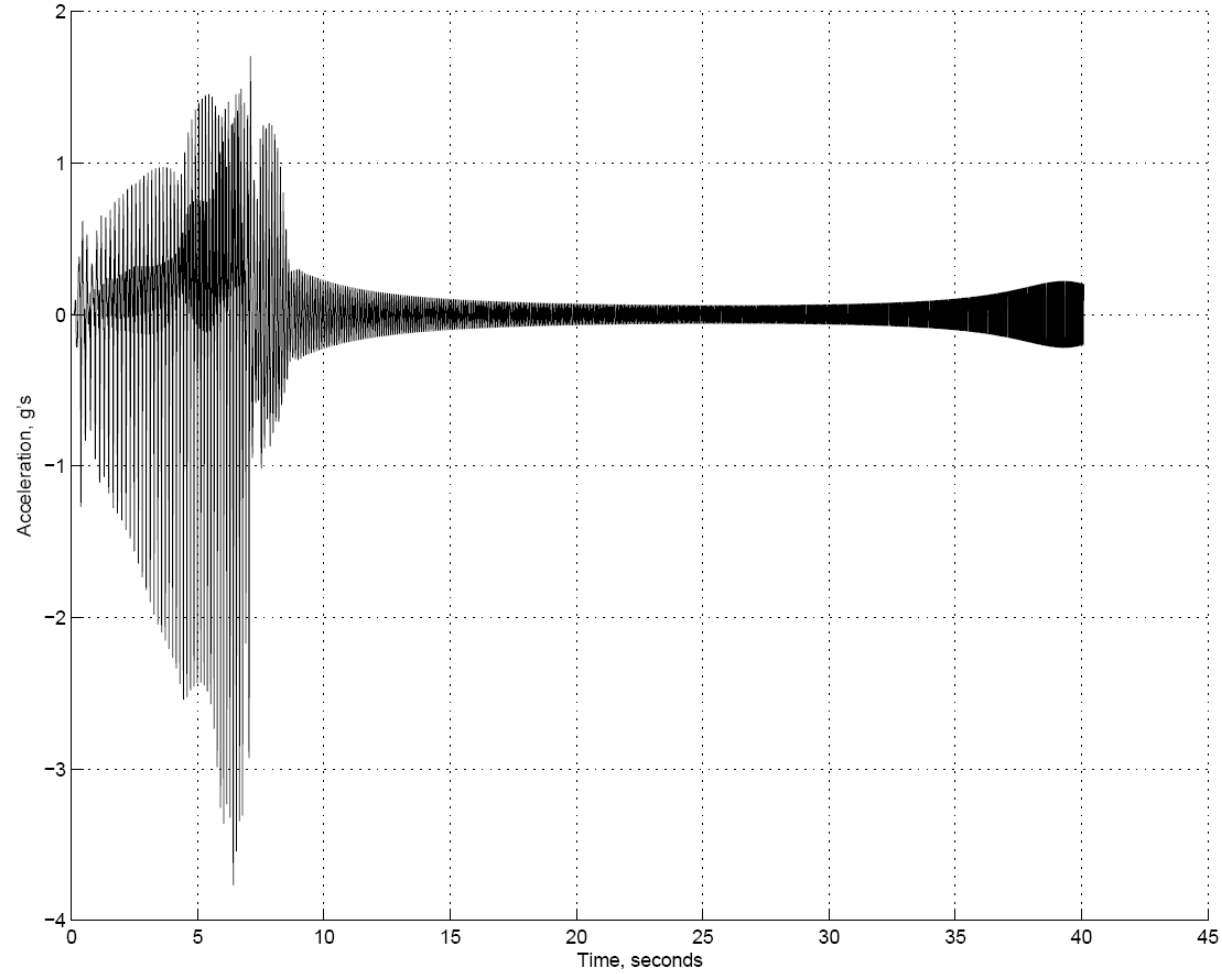
**Figure 10-26** Channel 10 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97402: lower +Y



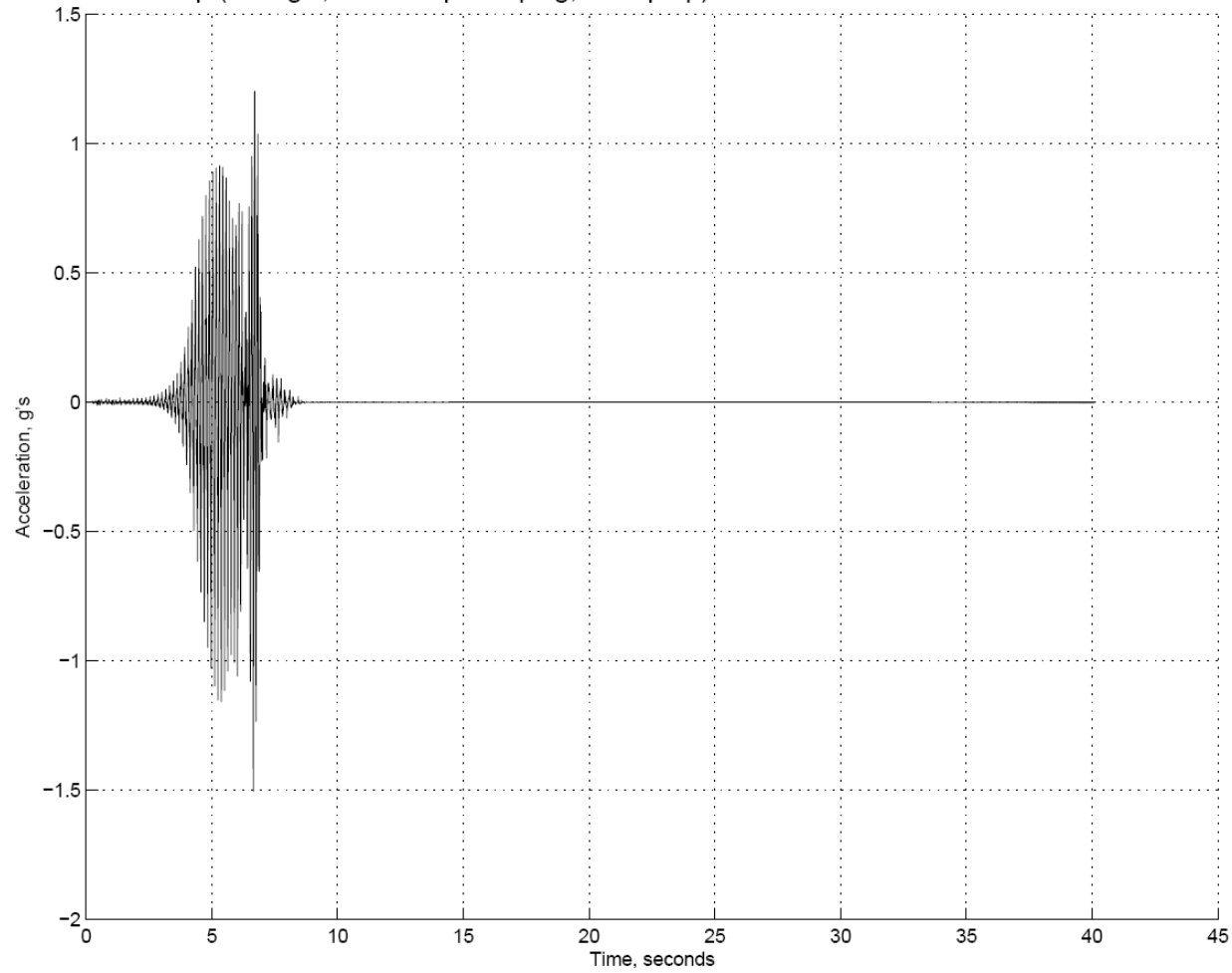
**Figure 10-27** Channel 11 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97402: lower +Y



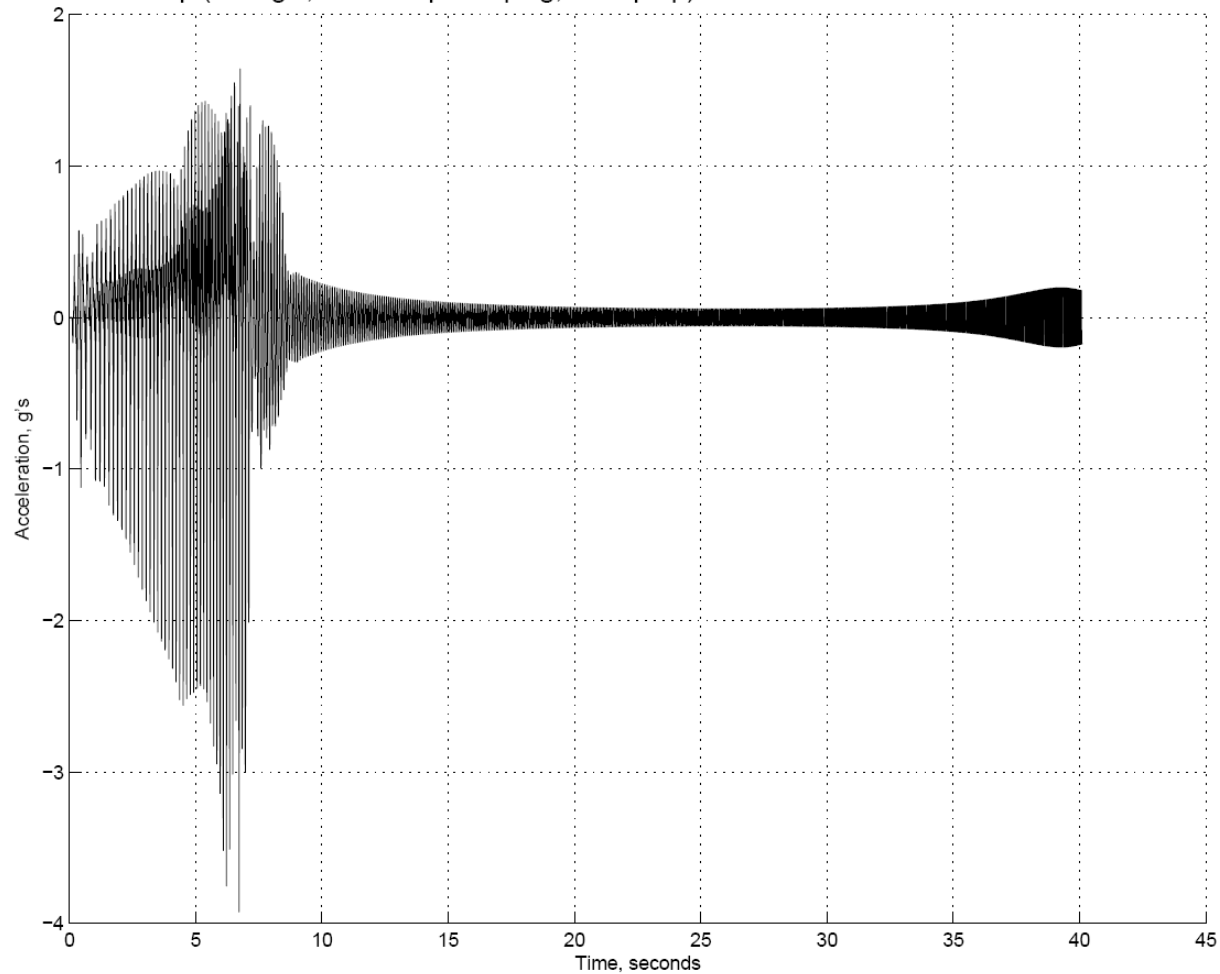
**Figure 10-28** Channel 12 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97403: upper -Y



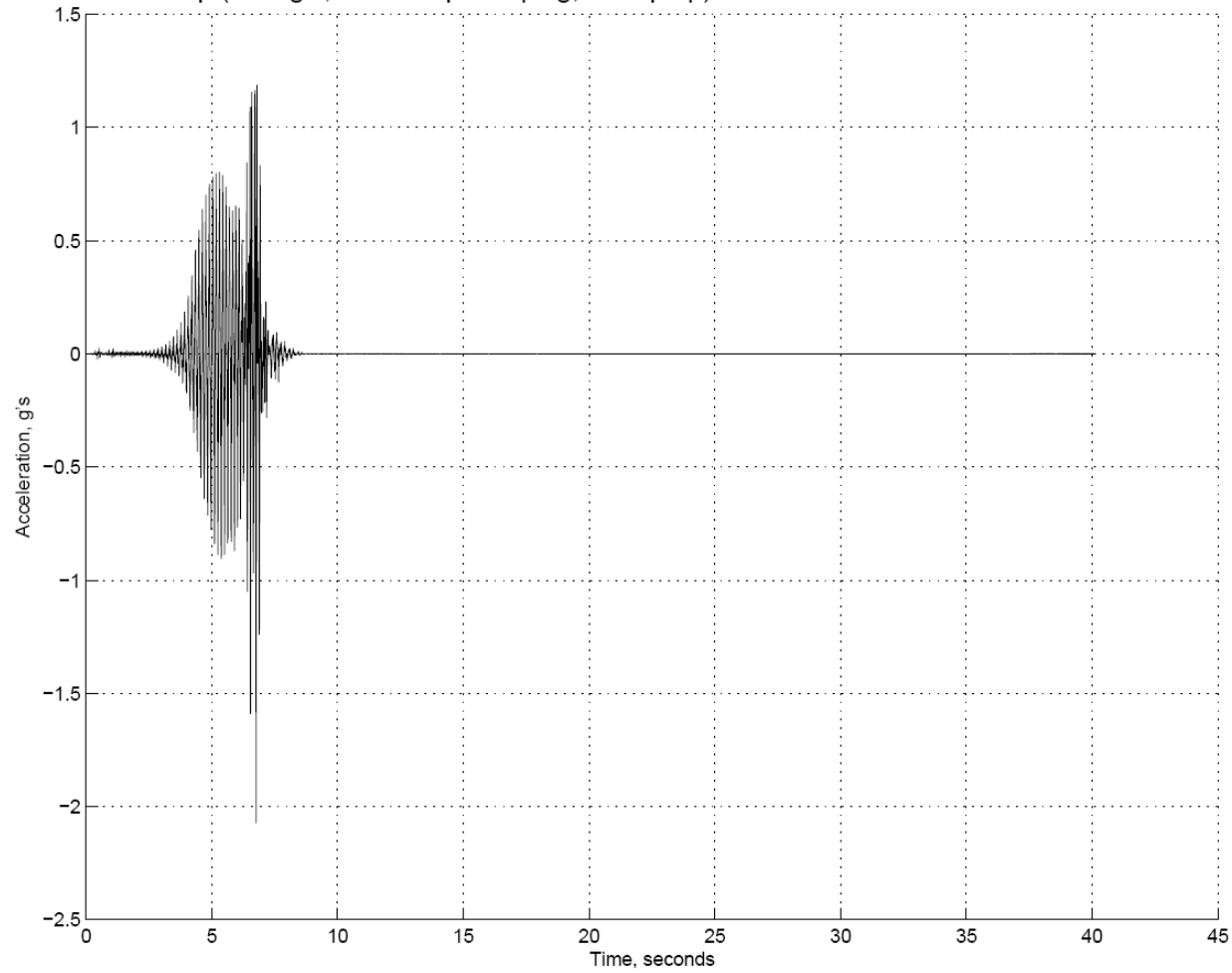
**Figure 10-29** Channel 13 accelerometer response for the y-axis configuration with 0.37 g excitation

Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97403: upper -Y



**Figure 10-30** Channel 14 accelerometer response for the y-axis configuration with 0.37 g excitation

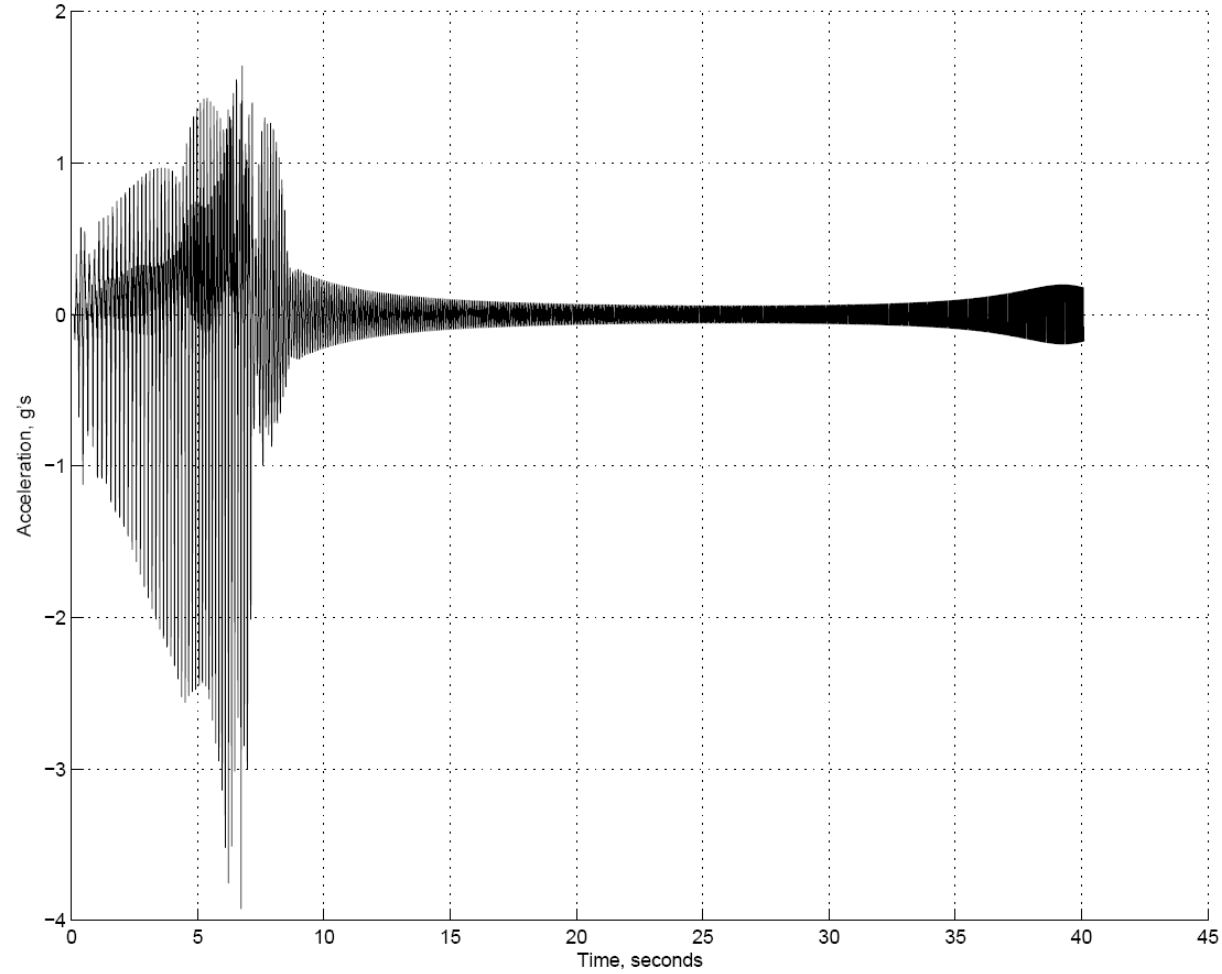
Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97404: lower -Y



**Figure 10-31** Channel 15 accelerometer response for the y-axis configuration with 0.37 g excitation

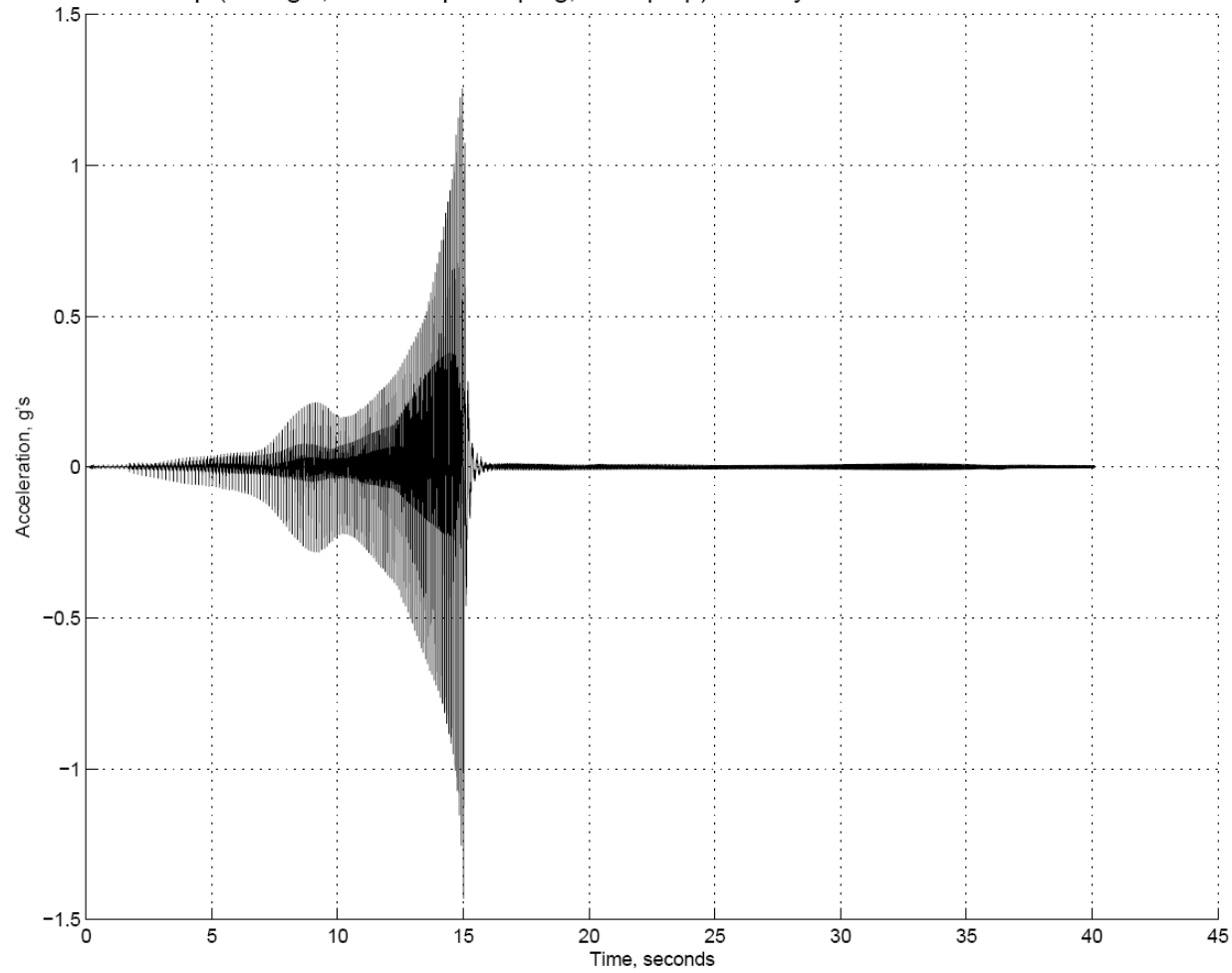


Y-axis Sine Sweep (0.37 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97404: lower -Y



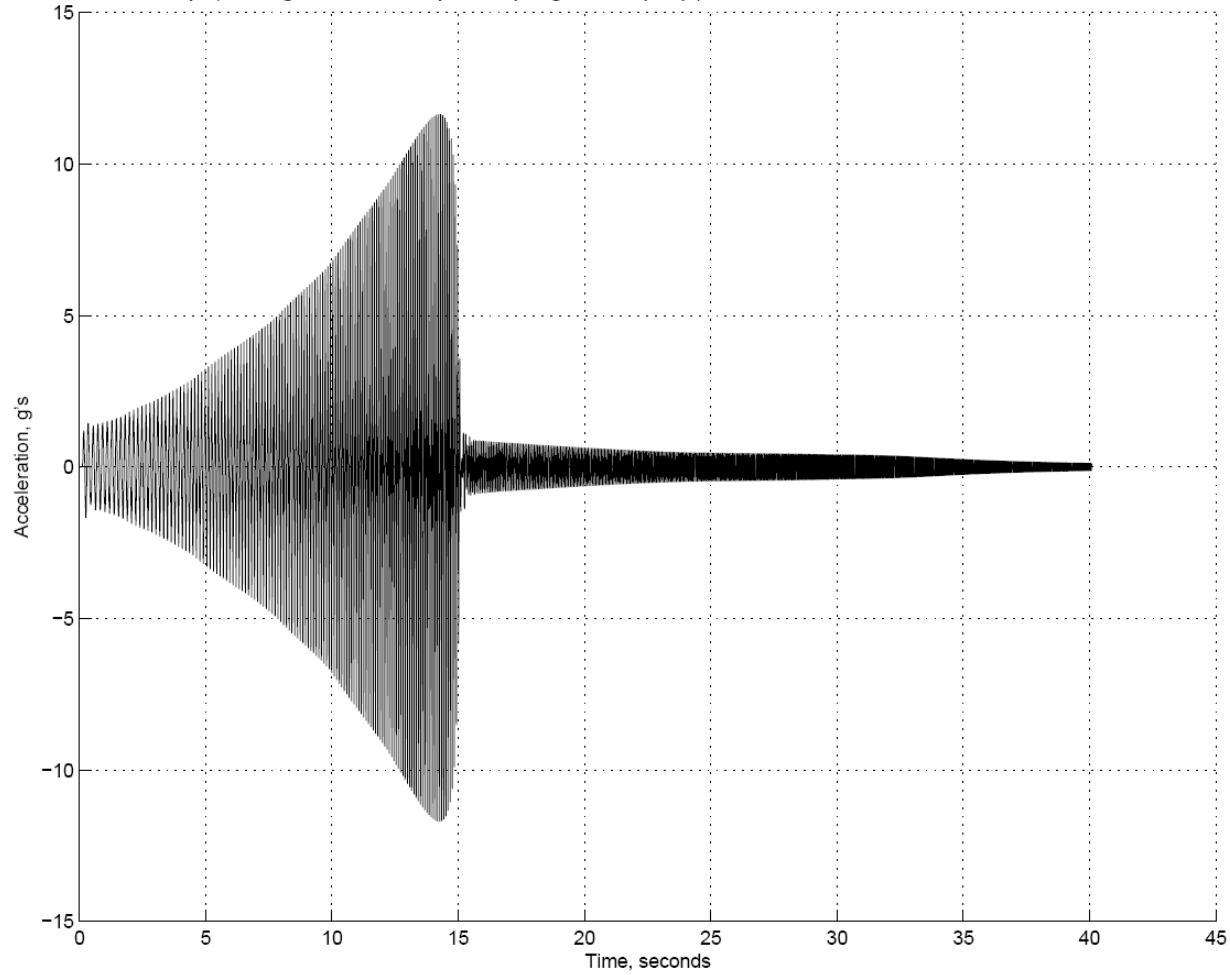
**Figure 10-32** Channel 16 accelerometer response for the y-axis configuration with 0.37 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91004: upper +X



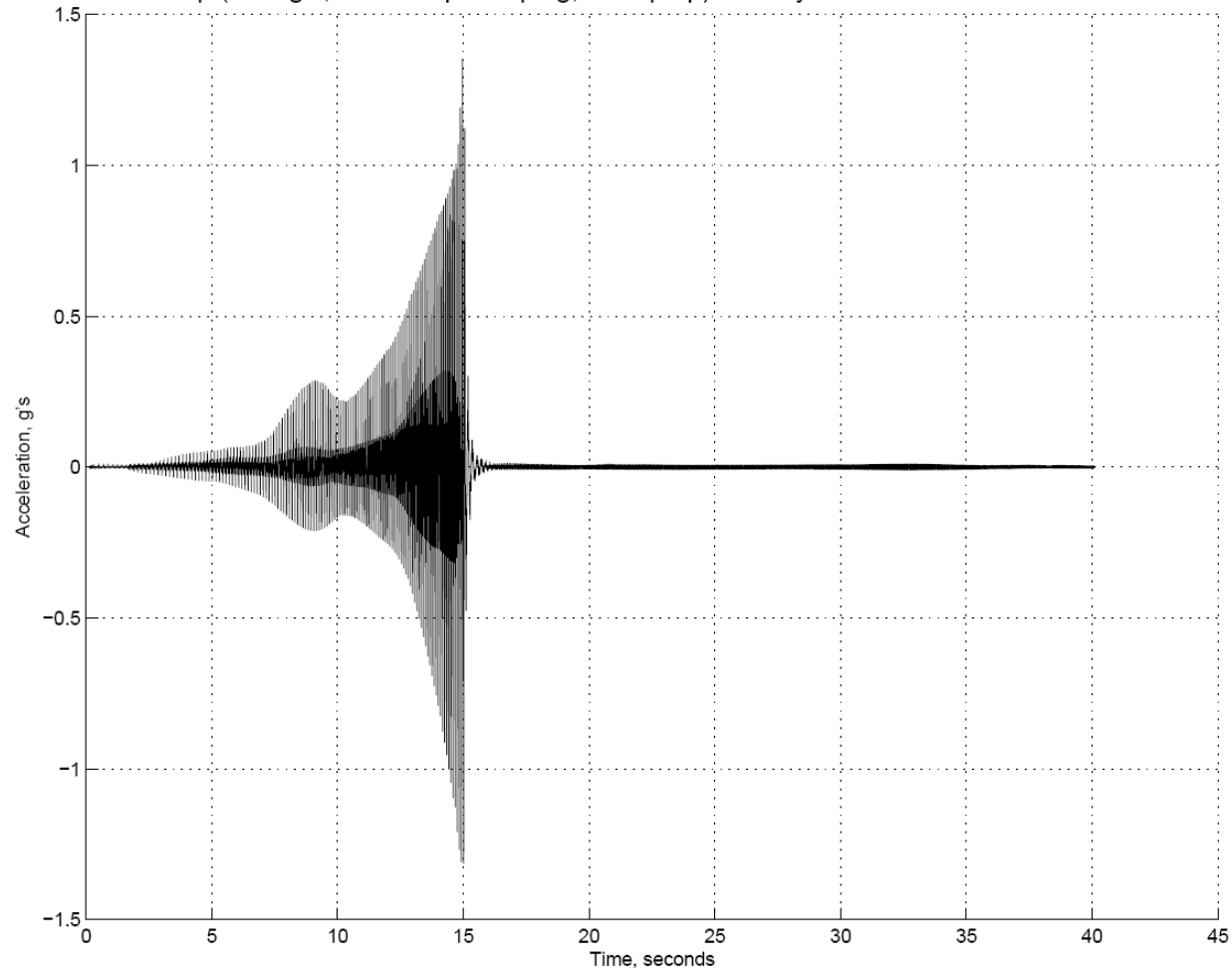
**Figure 10-33** Channel 1 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91004: upper +X



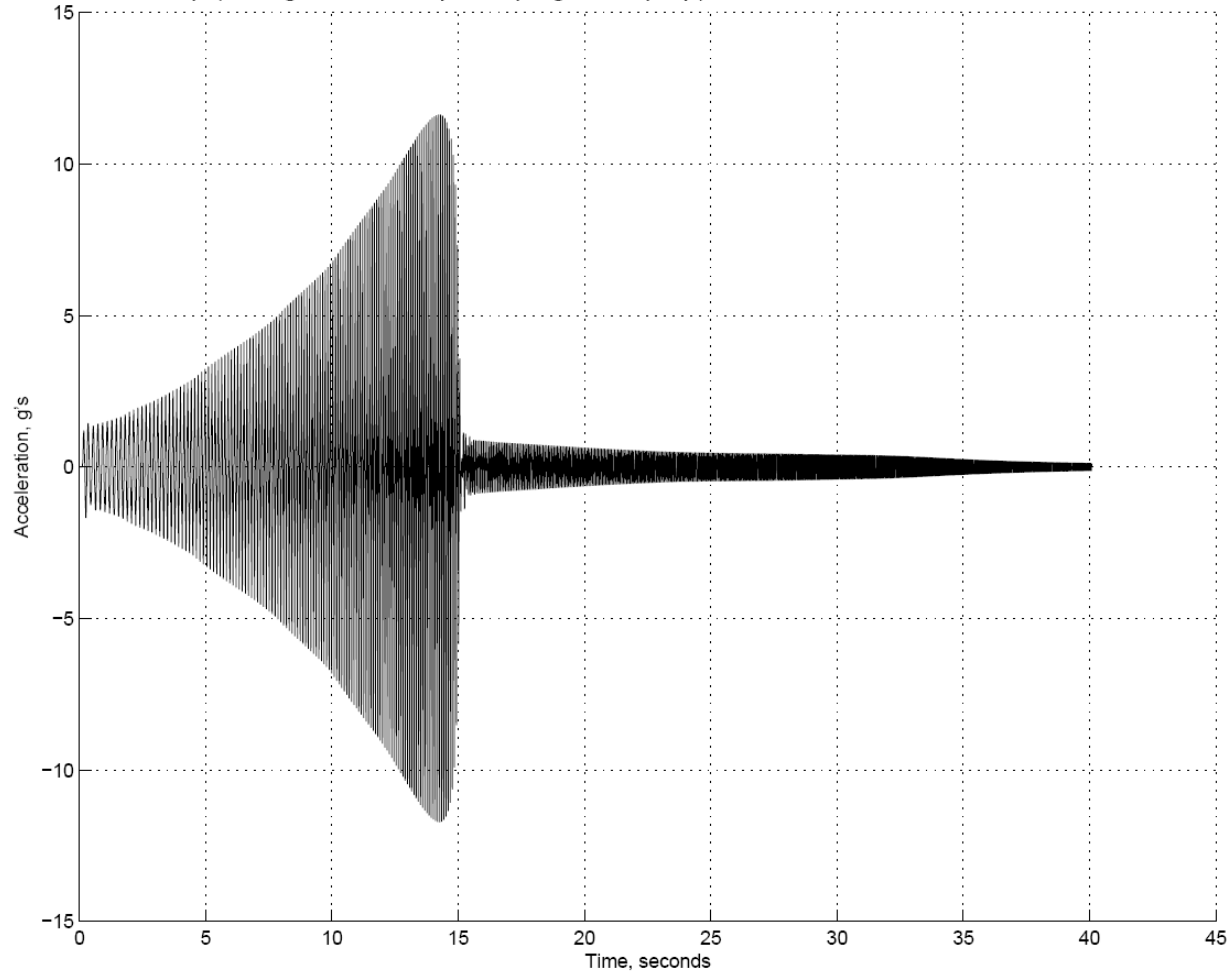
**Figure 10-34** Channel 2 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91017: lower +X



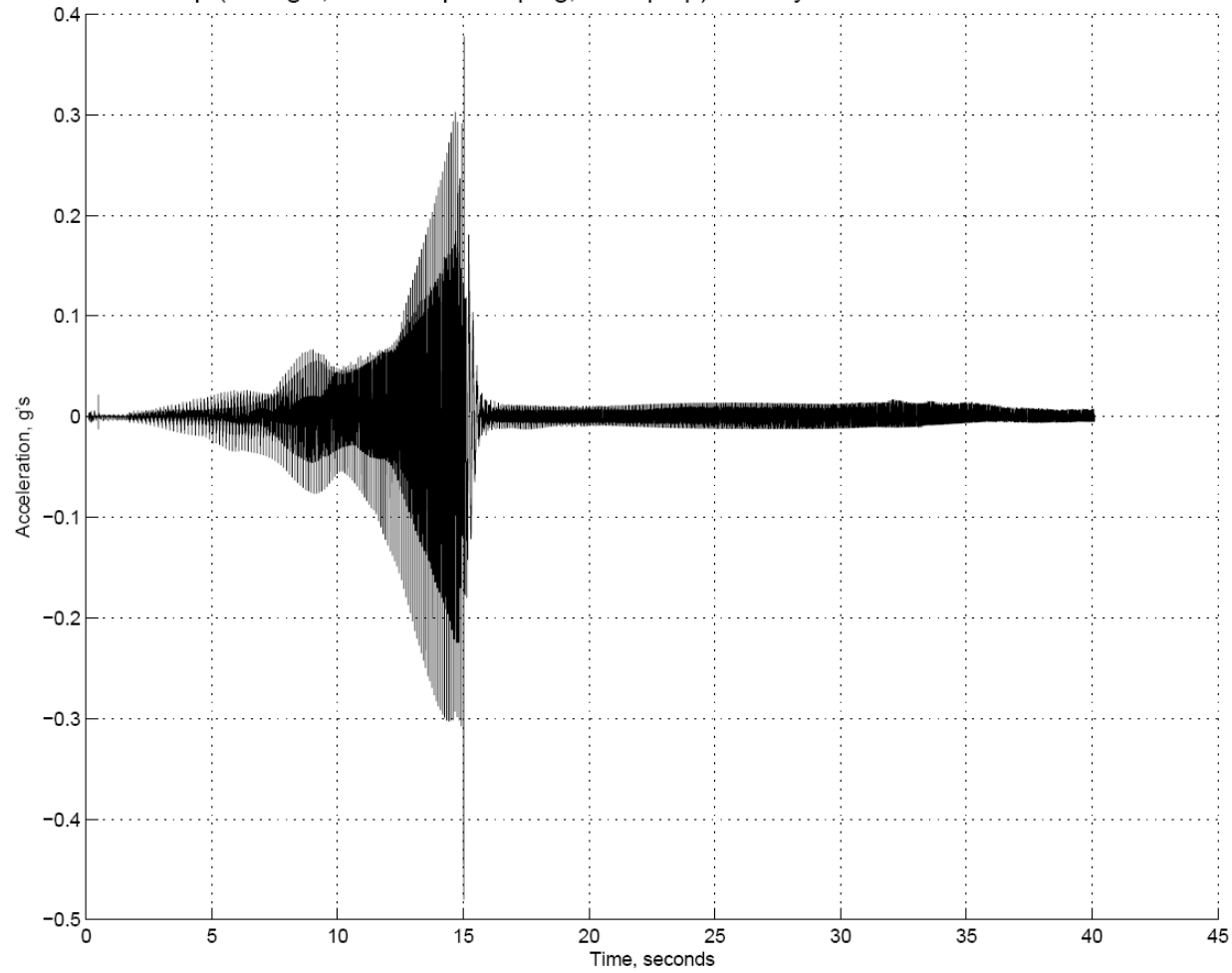
**Figure 10-35** Channel 3 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91017: lower +X



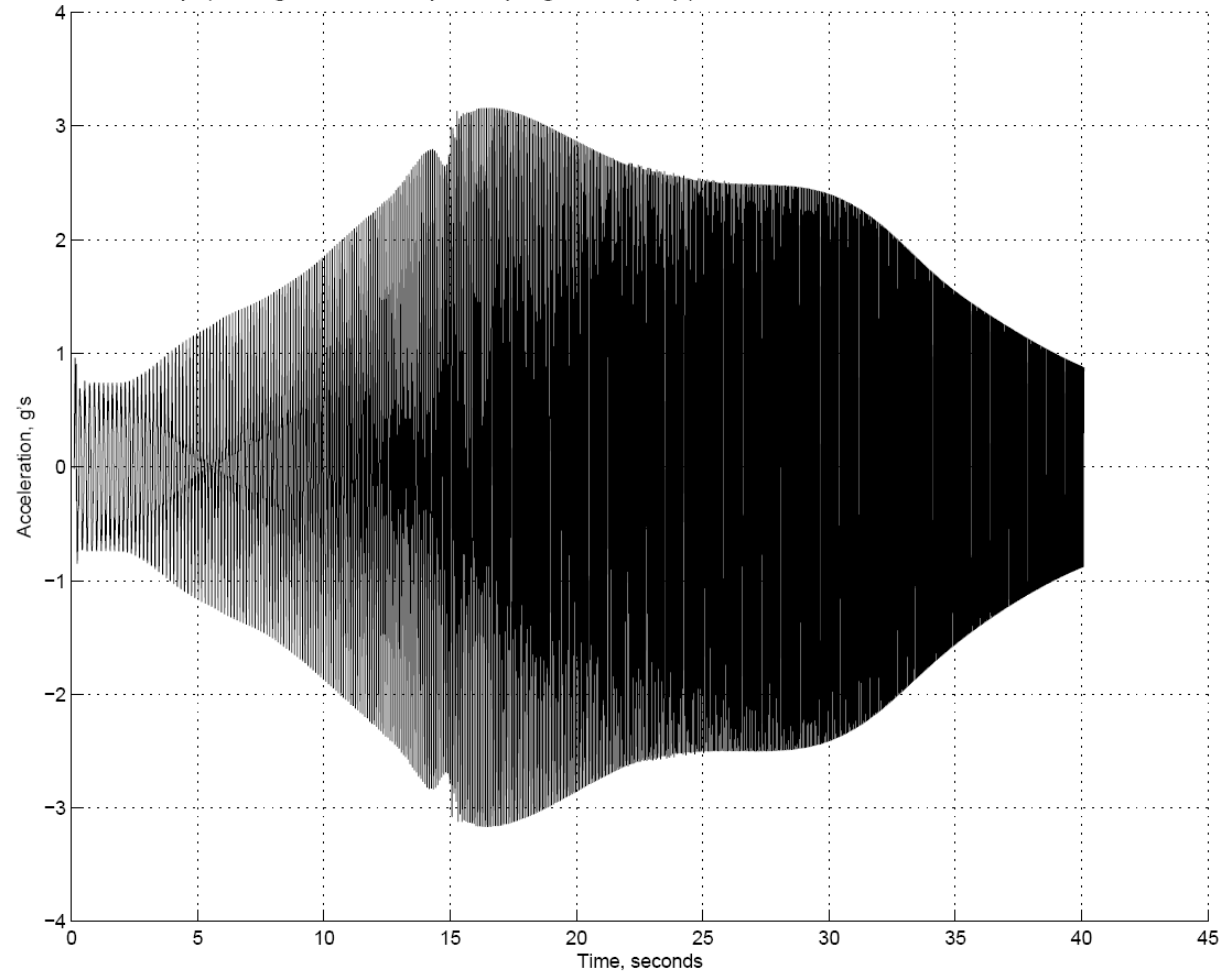
**Figure 10-36** Channel 4 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91068: upper -X



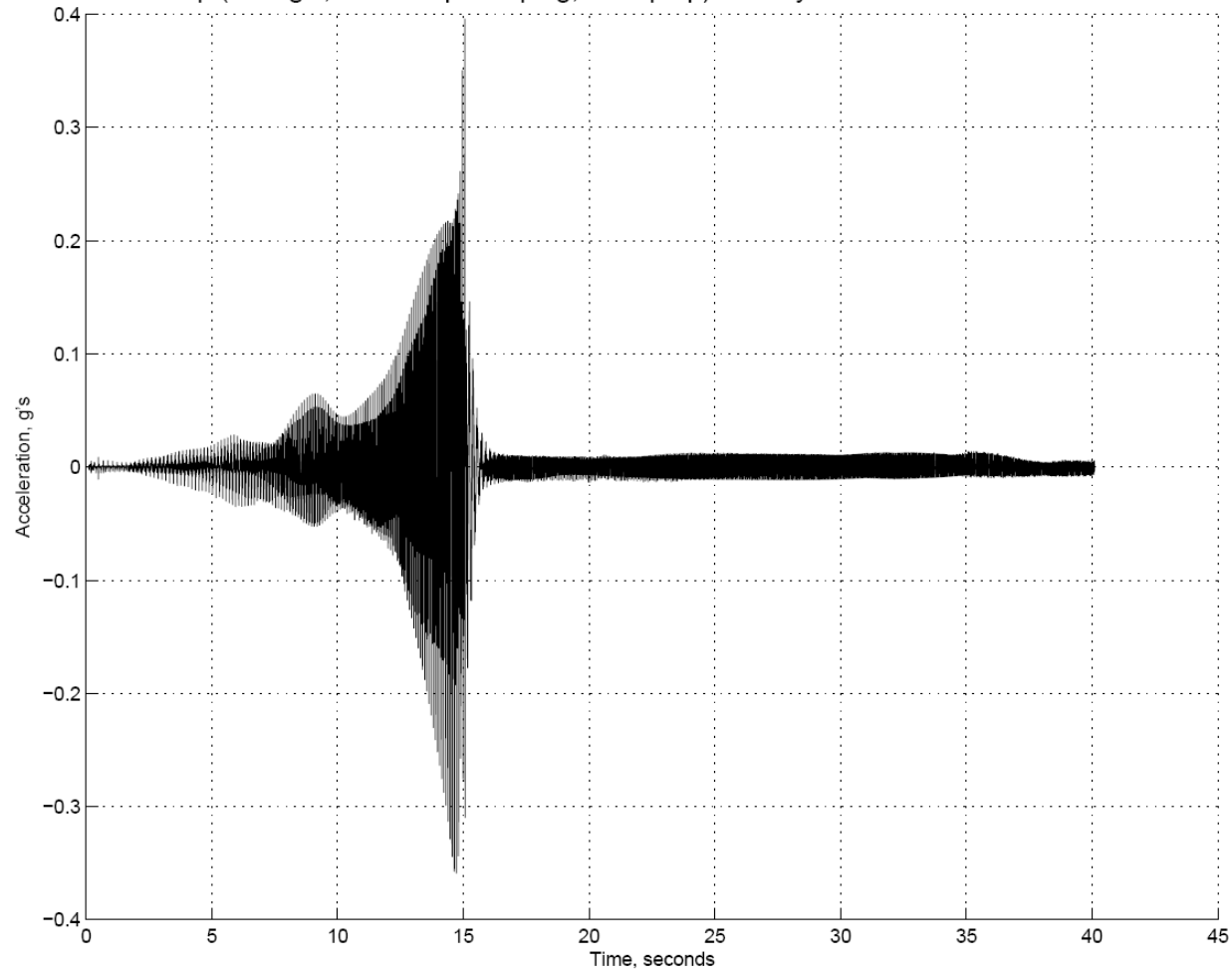
**Figure 10-37** Channel 5 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91068: upper -X



**Figure 10-38** Channel 6 accelerometer response for the z-axis configuration with 0.68 g excitation

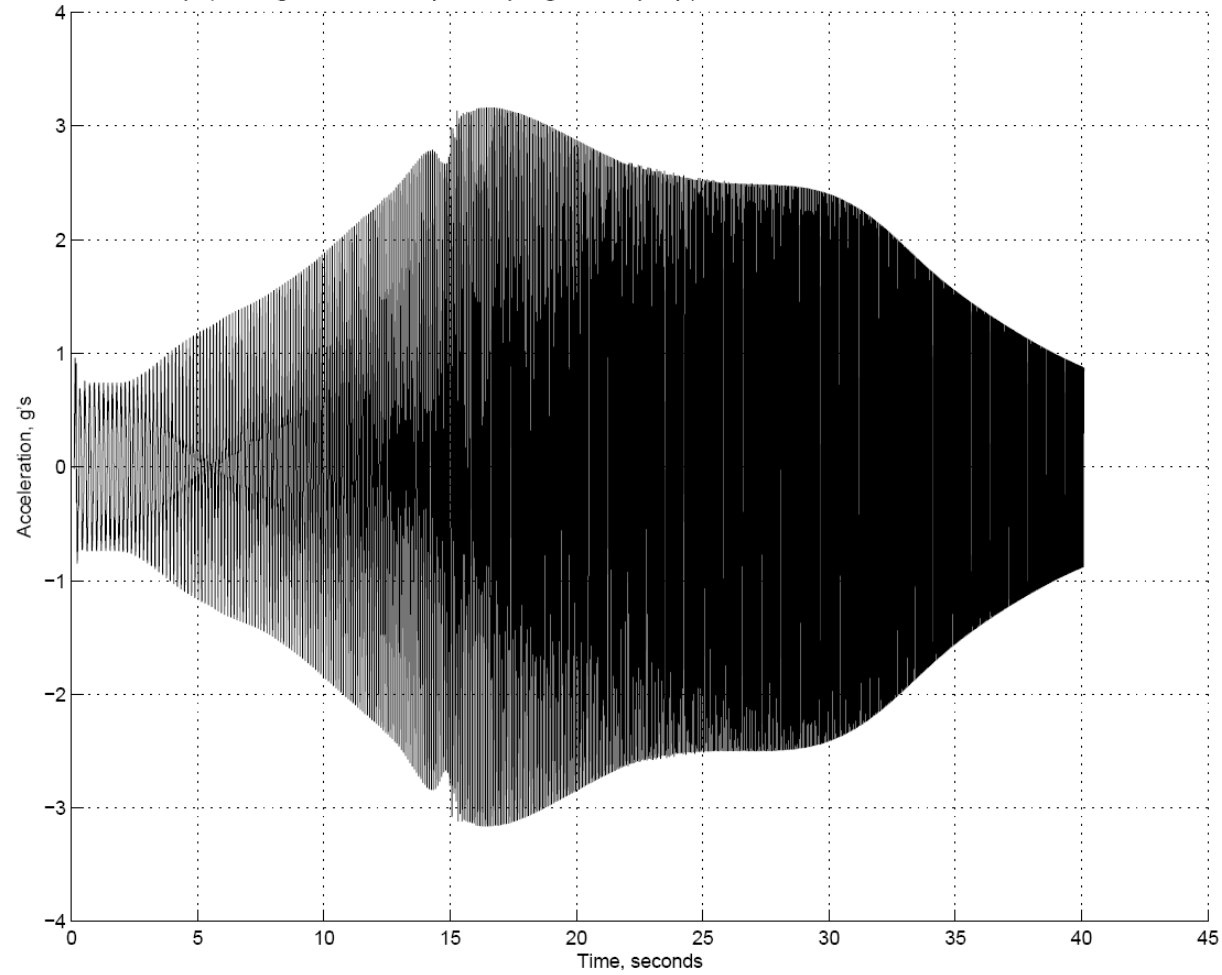
Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR y-axis acceleration at Node 91123: lower -X



**Figure 10-39** Channel 7 accelerometer response for the z-axis configuration with 0.68 g excitation

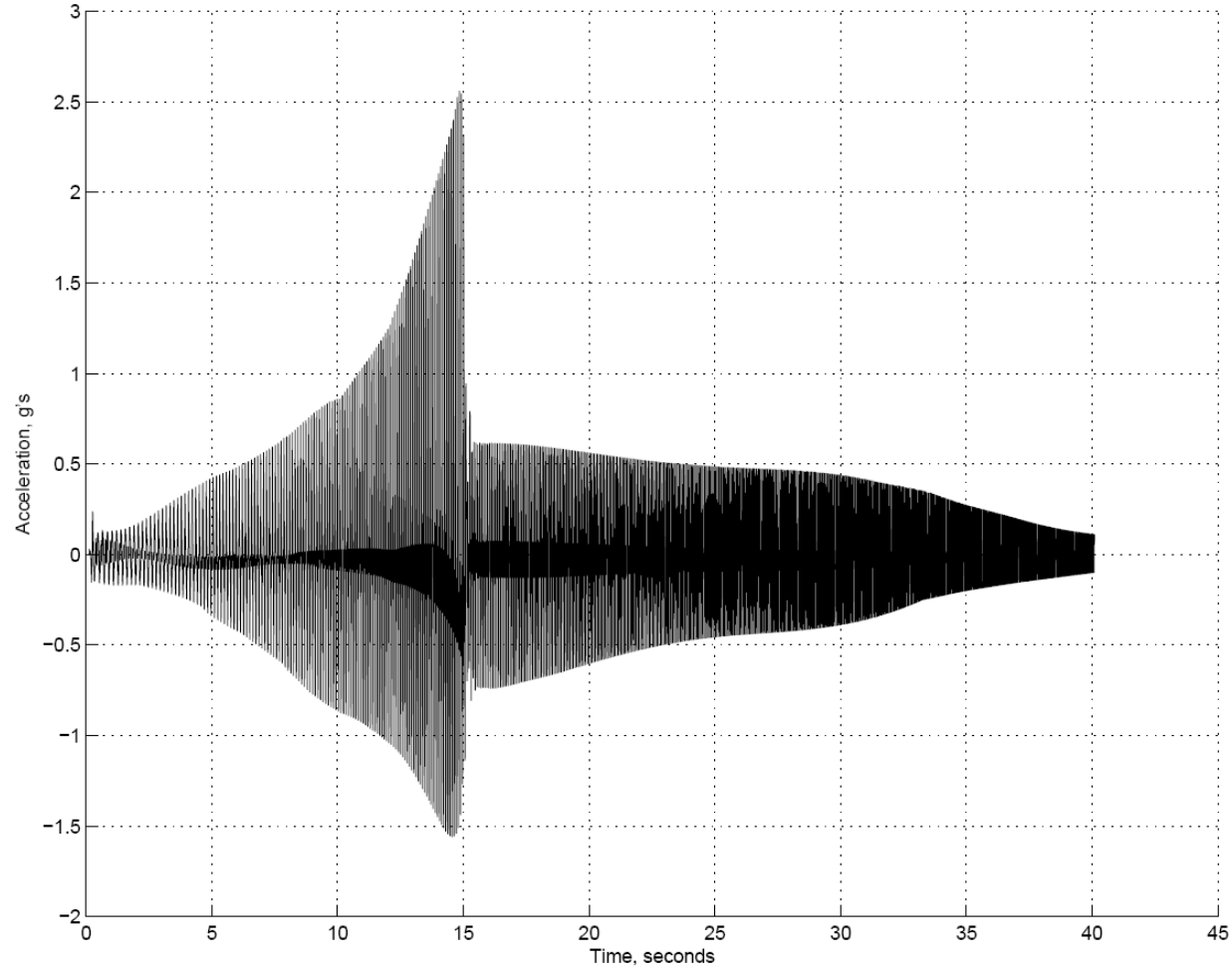


Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 91123: lower -X



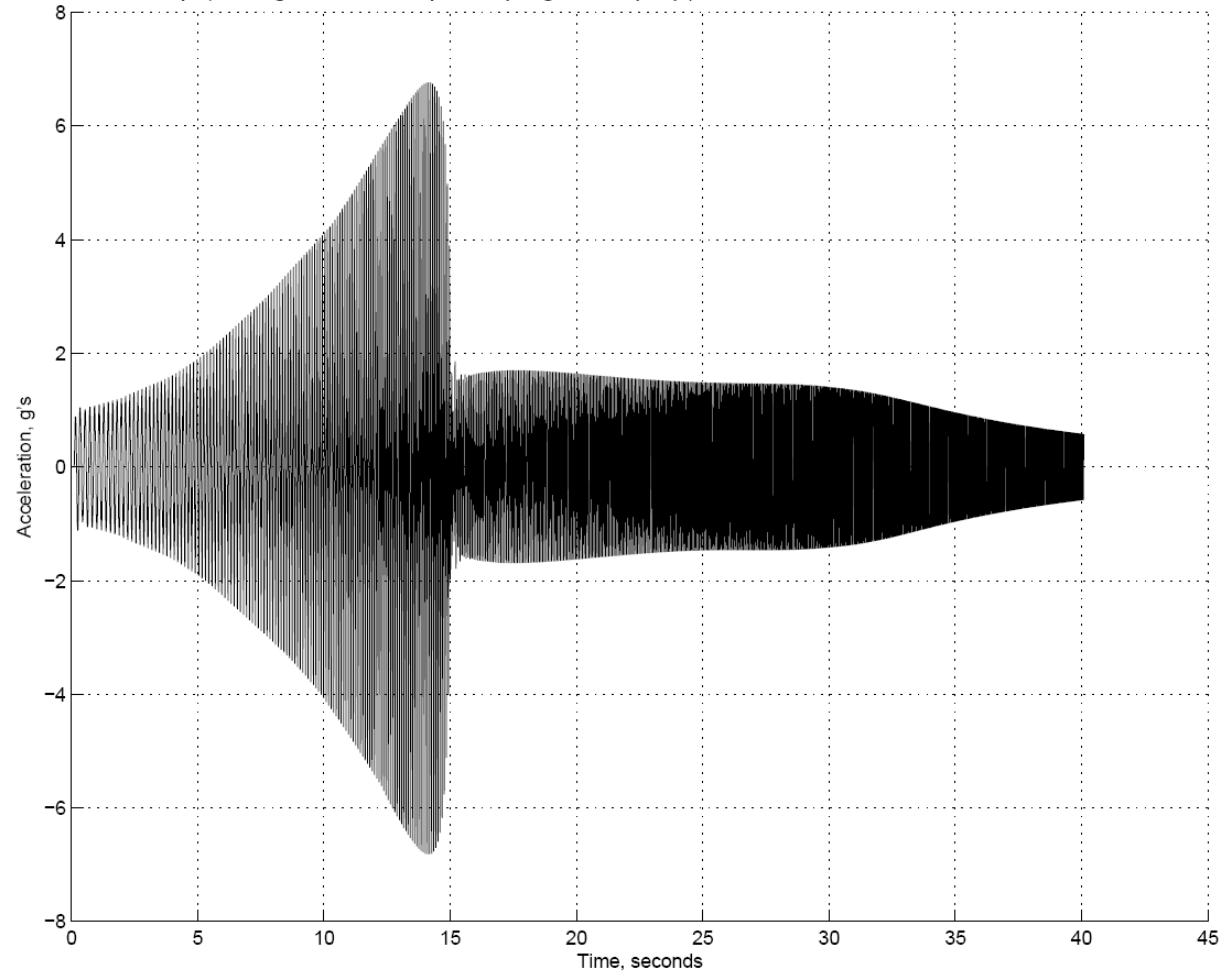
**Figure 10-40** Channel 8 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97401: upper +Y



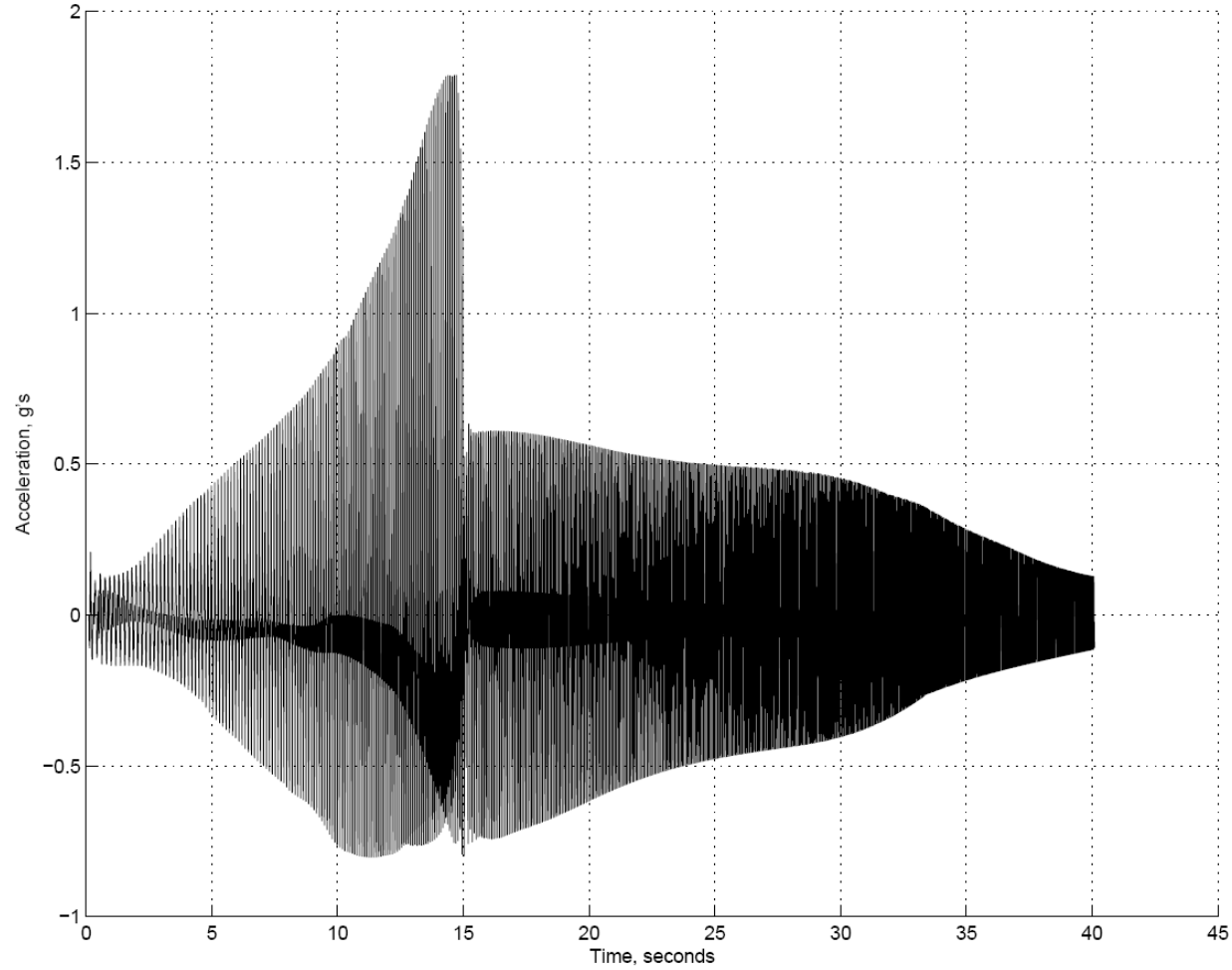
**Figure 10-41** Channel 9 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97401: upper +Y



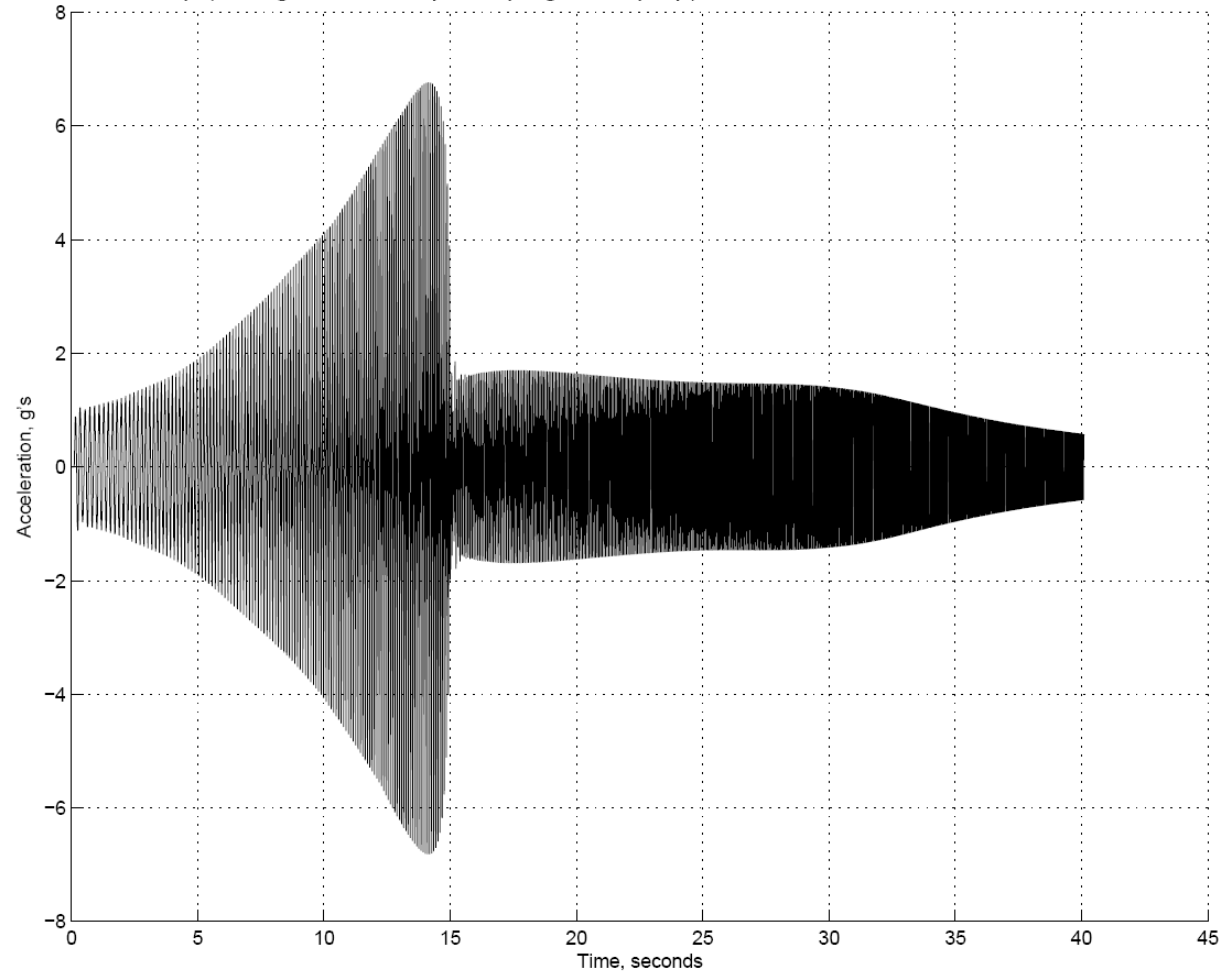
**Figure 10-42** Channel 10 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97402: lower +Y



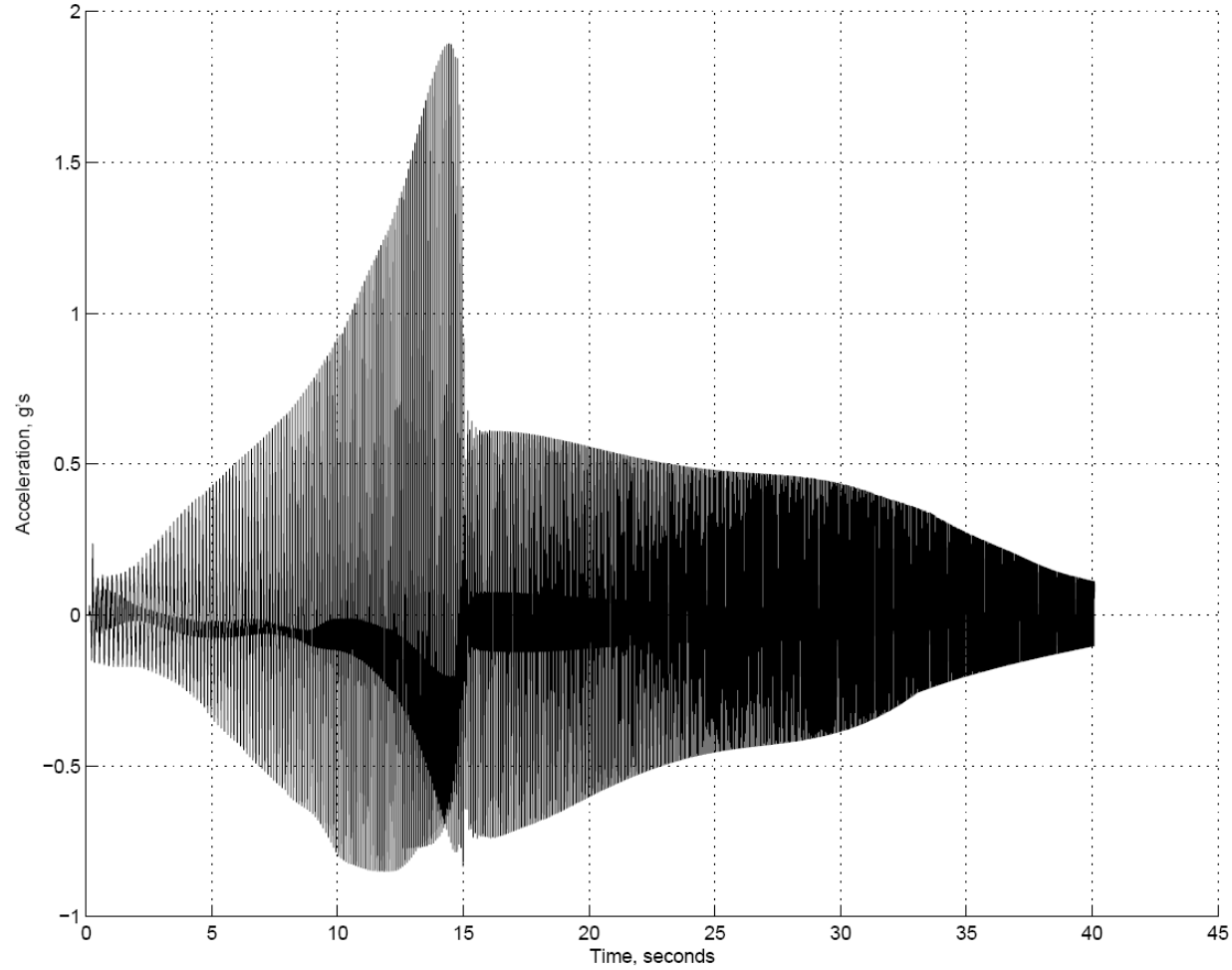
**Figure 10-43** Channel 11 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97402: lower +Y



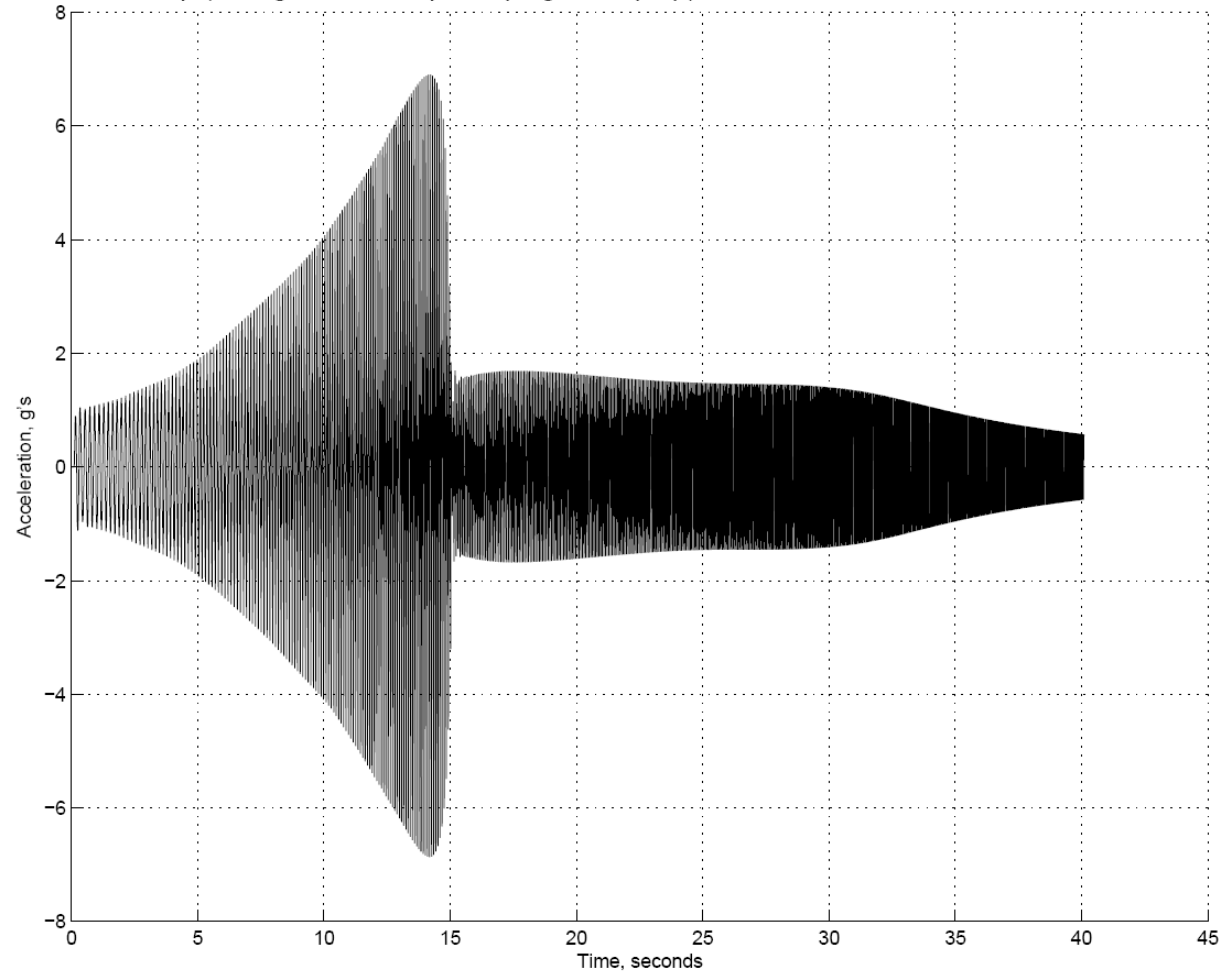
**Figure 10-44** Channel 12 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97403: upper -Y



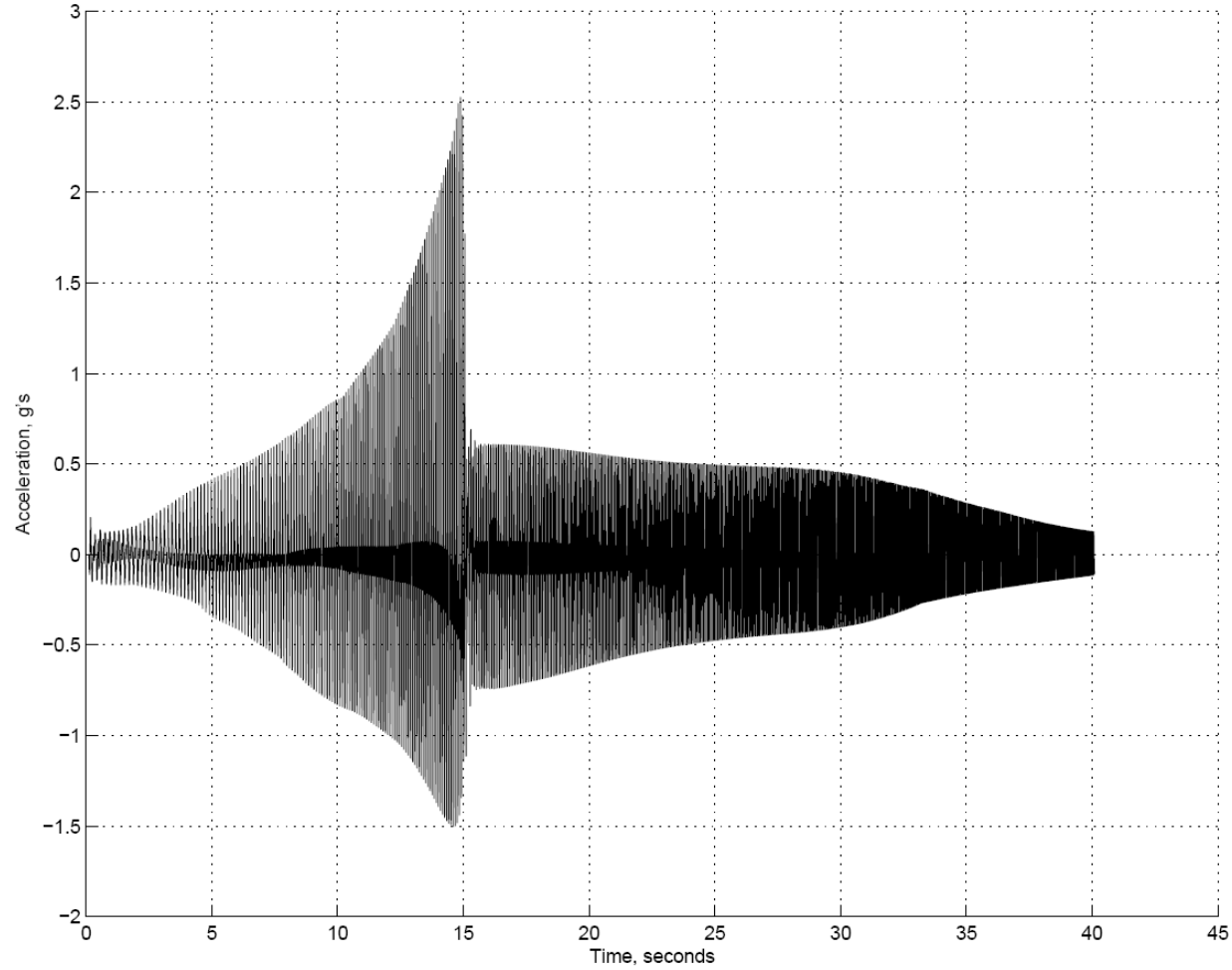
**Figure 10-45** Channel 13 accelerometer response for the z-axis configuration with 0.68 g excitation

Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97403: upper -Y



**Figure 10-46** Channel 14 accelerometer response for the z-axis configuration with 0.68 g excitation

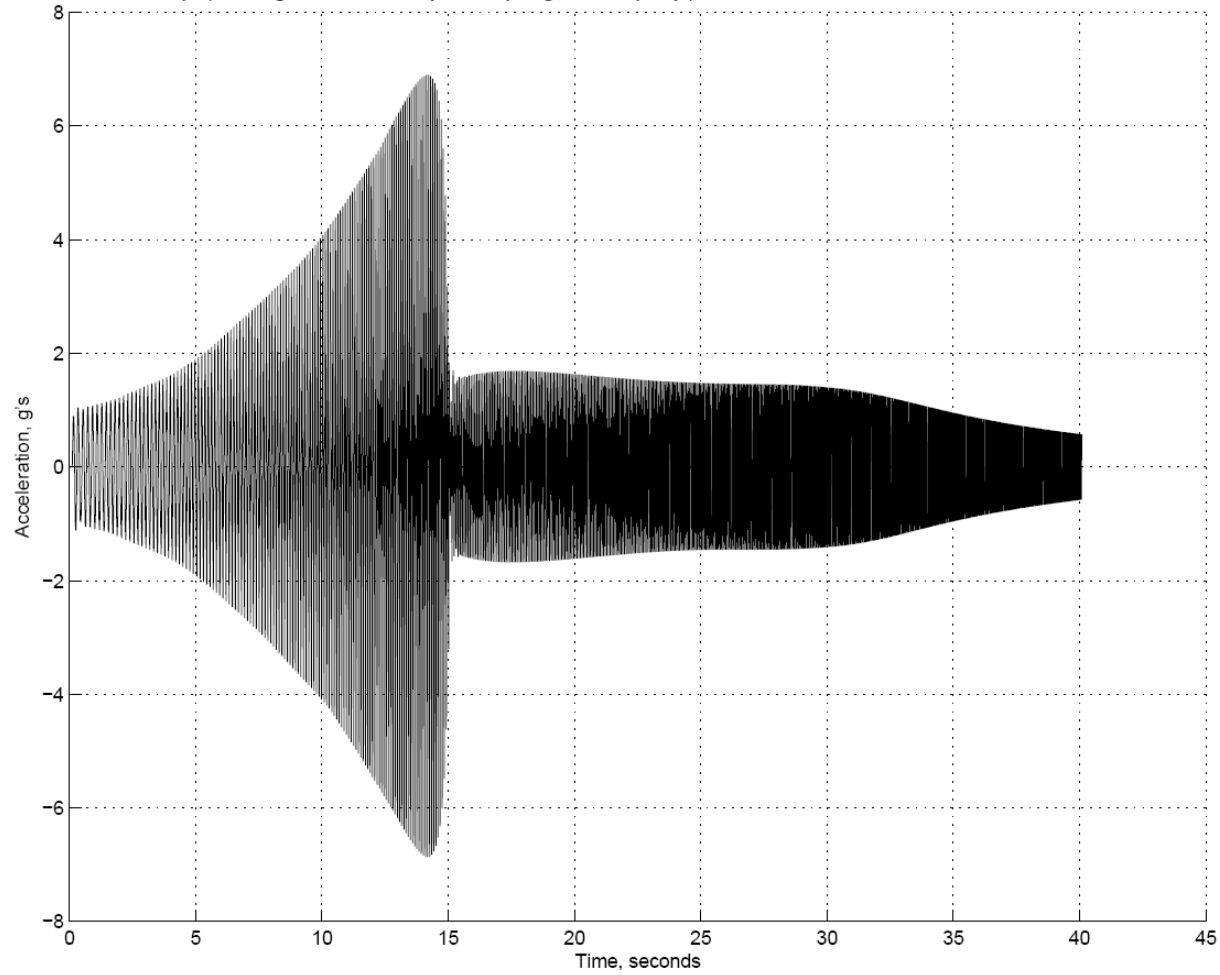
Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR x-axis acceleration at Node 97404: lower -Y



**Figure 10-47** Channel 15 accelerometer response for the z-axis configuration with 0.68 g excitation



Z-axis Sine Sweep (0.68 g's, 14% strap damping, sweep up): CMR z-axis acceleration at Node 97404: lower -Y



**Figure 10-48** Channel 16 accelerometer response for the z-axis configuration with 0.68 g excitation